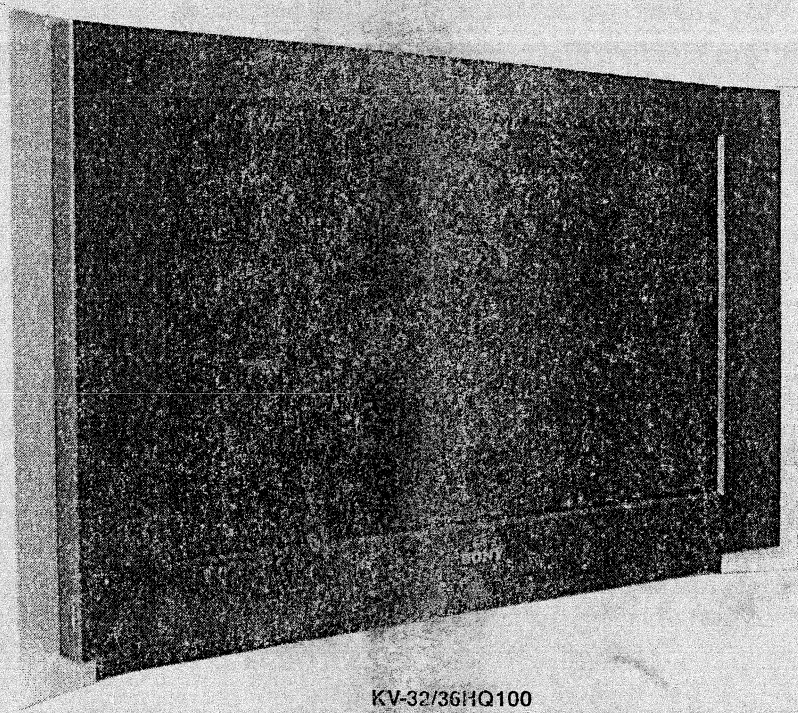


SERVICE MANUAL

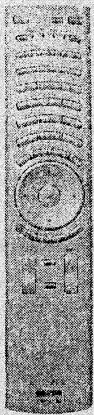
AE-7A CHASSIS

MODEL	COMMANDER	DEST	CHASSIS NO.	MODEL	COMMANDER	DEST	CHASSIS NO.
KV-32HQ100B	RM-940	FR	SCC-R12B-A	KV-36HQ100B	RM-940	FR	SCC-R12A-A
KV-32HQ100E	RM-940	ESP	SCC-R13A-A	KV-36HQ100E	RM-940	ESP	SCC-R13B-A
KV-32HQ100K	RM-940	OIRT	SCC-R11B-A	KV-36HQ100K	RM-940	OIRT	SCC-R11A-A

FD Trinitron



KV-32/36HQ100



RM-940

TRINITRON[®] COLOR TV
SONY[®]

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CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR THE CARBON PAINTED ON THE CRT, AFTER REMOVAL OF THE ANODE CAP.

WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE WORK TO AVOID POSSIBLE SHOCK HAZARD DUE TO LIVE CHASSIS, THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE POWER LINE.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARKED Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION

APRES AVOIR DECONNECTE LE CAP DE L'ANODE, COURT-CIRCUITER L'ANODE DU TUBE CATHODIQUE ET CELUI DE L'ANODE DU CAP AU CHASSIS METALLIQUE DE L'APPAREIL, OU AU COUCHE DE CARBONE PEINTE SUR LE TUBE CATHODIQUE OU AU BLINDAGE DU TUBE CATHODIQUE.

ATTENTION !!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHASSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISE LORS DE TOUT DEPANNAGE LE CHASSIS DE CE RECEPTEUR EST DIRECTEMENT RACCORDE A L'ALIMENTATION SECTEUR.

ATTENTION AUX COMPOSANTS RELATIFS A

LA SECURITE!!

LES COMPOSANTS IDENTIFIES PAR UNE TRAME ET PAR UNE MARQUE Δ SUR LES SCHEMAS DE PRINCIPE, LES VUES EXPLOSEES ET LES LISTES DE PIECES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SECURITE DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMERO DE PIECE EST INDIQUE DANS LE PRESENT MANUEL OU DANS DES SUPPLEMENTS PUBLIES PAR SONY.

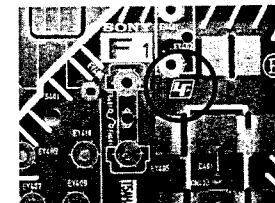
CAUTION

Lead Free Soldered Boards

The circuit boards listed below [Table 1] used in these models may have been processed using Lead Free Solder. The boards are identified by the LF logo located close to the board designation e.g. F1, H1 etc [see examples]. The servicing of these boards requires special precautions to be taken as outlined below.



example 1



example 2

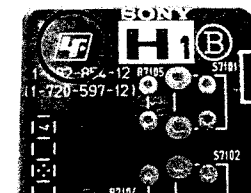


Table 1

Board	Function
F	AC Switch, SIRCS Rx, LED
H	Front AV & Headphone

It is strongly recommended to use Lead Free Solder material in order to guarantee optimal quality of new solder joints. Lead Free Solder is available under the following part numbers :

Partnumber	Diameter	Remarks
7-640-005-19	0.3mm	0.25Kg
7-640-005-20	0.4mm	0.50Kg
7-640-005-21	0.5mm	0.50Kg
7-640-005-22	0.6mm	0.25Kg
7-640-005-23	0.8mm	1.00Kg
7-640-005-24	1.0mm	1.00Kg
7-640-005-25	1.2mm	1.00Kg
7-640-005-26	1.6mm	1.00Kg

Due to the higher melting point of Lead Free Solder the soldering iron tip temperature needs to be set to 370 degrees centigrade. This requires soldering equipment capable of accurate temperature control coupled with a good heat recovery characteristics.

For more information on the use of Lead Free Solder, please refer to <http://www.sony-training.com>

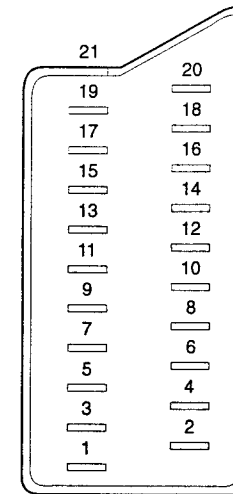
ITEM MODEL	Television System	Stereo System	Channel Coverage	Color System
B	B/G/H, D/K, I, L	GERMAN/NICAM Stereo	VHF : E02-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S05, S1-S20 HYPER : S21-S41	PAL, SECAM NTSC3.58/4.43 (VIDEO IN)
E	B/G/H, D/K	GERMAN/NICAM Stereo	VHF : E02-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S05, S1-S20 HYPER : S21-S41	PAL, SECAM NTSC3.58/4.43 (VIDEO IN)
K	B/G/H, D/K	GERMAN/NICAM Stereo	VHF : E02-E12, R01-R12 UHF : E21-E69, R21-R69 CABLE TV : S01-S05, S1-S20 HYPER : S21-S41	PAL, SECAM NTSC3.58/4.43 (VIDEO IN)

Picture Tube	Super Fine Pitch FD Trinitron Approx 82 cm (32 inches) (Approx 76 cm picture measured diagonally) KV-32HQ100 Approx 92 cm (36 inches) (Approx 88 cm picture measured diagonally) KV-36HQ100	Sound Output	
		Right and Left speaker	2x20W (Music Power) 2x10W (RMS)
		Subwoofer	1x30W (Music Power) 1x15W (RMS)
Input/Output Terminals [REAR]		General Specifications	
1: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Power Requirements	220 - 240V
		Power Consumption	Approx 160W (KV-32HQ100) Approx 160W (KV-36HQ100)
2: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for RGB. Outputs of TV Video and Audio signals.	Dimensions	Approx 1015x 575 x 590mm (KV-32HQ100) Approx 1100x 625 x 620mm (KV-36HQ100)
3: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for S Video. Outputs for Video and Audio signals (selectable)	Weight	Approx 68kg (KV-32HQ100) Approx 78kg (KV-36HQ100)
4: 21-pin Euro connector (CENELEC standard)	Inputs for Audio and Video signals. Inputs for S Video.	Supplied Accessories	RM-940 Remote Commander IEC designated AA battery (2)
Phono Jacks	Output Connectors variable for Audio Signals		
PCMCIA Socket	Conditional Access Module	Other Features	100 Hz, DCF, DNR, Auto Noise Reduction, PAP, Picture & Text, Picture Freeze, DQP & DF, Virtual Dolby, BBE, EPG
Input/Output Terminals [SIDE]		Remote control system : Infrared control	
Headphone jack	stereo mini jack	Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
5: Audio inputs	phono jacks		
5: Video inputs	phono jacks		
5: S Video input	4 pin DIN		
Design and specifications are subject to change without notice.			

Design and specifications are subject to change without notice.

Model Name	KV-32HQ100B	KV-32HQ100E	KV-32HQ100K
Item	KV-36HQ100B	KV-36HQ100E	KV-36HQ100K
Pal Comb	OFF	OFF	OFF
PIP	OFF	OFF	OFF
RGB Priority	ON	ON	ON
Woofer Box	ON	ON	ON
Scart 1	ON	ON	ON
Scart 2	ON	ON	ON
Scart 3	ON	ON	ON
Scart 4	ON	ON	ON
Side in (5)	ON	ON	ON
Projector	OFF	OFF	OFF
Norm B/G	ON	ON	ON
Norm I	ON	OFF	OFF
Norm D/K	ON	ON	ON
Norm AUS	OFF	OFF	OFF
Norm L	ON	OFF	OFF
Norm SAT	OFF	OFF	OFF
Norm M	OFF	OFF	OFF
Teletext	ON	ON	ON
Nicam Stereo	ON	ON	ON

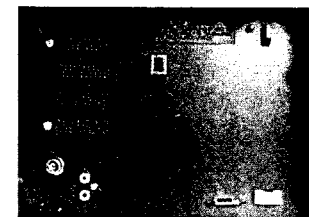
21 pin connector



Pin No	1	2	3	4	Signal	Signal level
1	○	○	○	●	Audio output B (right)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
2	○	○	○	○	Audio input B (right)	Standard level : 0.5V rms Output impedance : More than 10kohm*
3	○	○	○	●	Audio output A (left)	Standard level : 0.5V rms Output impedance : Less than 1kohm*
4	○	○	○	○	Ground (audio)	
5	○	○	○	○	Ground (blue)	
6	○	○	○	○	Audio input A (left)	Standard level : 0.5V rms Output impedance : More than 10kohm*
7	○	○	○	●	Blue input	0.7 +/- 3dB, 75 ohms positive
8	○	○	○	○	Function select (AV control)	High state (9.5-12V) : Part mode Low state (0-2V) : TV mode Input impedance : More than 10K ohms Input capacitance : Less than 2nF
9	○	○	○	○	Ground (green)	
10	○	○	○	○	Open	
11	○	○	○	●	Green	Green signal : 0.7 +/- 3dB, 75 ohms, positive
12	○	○	○	○	Open	
13	○	○	○	○	Ground (red)	
14	○	○	○	○	Ground (blanking)	
15	○	○	○	●	Red input	0.7 +/- 3dB, 75 ohms, positive
16	○	○	○	○	(S signal Chroma input)	0.3 +/- 3dB, 75 ohms, positive
17	○	○	○	○	Blanking input (Ys signal)	High state (1-3V) Low state (0-0.4V) Input impedance : 75 ohms
18	○	○	○	○	Ground (video output)	
19	○	○	○	○	Ground (video input)	
20	○	○	○	○	Video output	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
21	○	○	○	○	Video input	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	○	○	○	○	Video input Y (S signal)	1V +/- 3dB, 75ohms, positive sync 0.3V (-3+10dB)
	○	○	○	○	Common ground (plug, shield)	

○ Connected ● Not Connected (open) * at 20Hz - 20kHz

Rear Connection Panel



Front Connection Panel



S-Video socket

S Video socket pin configuration		
Pin No	Signal	Signal Level
1	Ground	-
2	Ground	-
3	Y (S signal) input	1V +/- 3dB 75ohm, positive Sync. 0.3V -3 +10dB
4	C (S signal) input	0.3V +/- 3dB 75ohm, positive Sync.

CUSTOMER SERVICE MENU

The Customer Service menu is provided in order to assist fault diagnosis when the customer reports a problem. The menu can be invoked by the customer on request from the service technician or dealer during a telephone conversation. The customer is then able to provide information regarding the current status of the set. The information gained can then help to increase the number of problems that are solved on the first call out by the service engineer and also reduce the amount of "No problem found" cases. The Customer Service Menu will be read only, preventing the customer from modifying the state of the TV at this time.

1. Entering the Customer Service Menu

The customer service menu can be entered by pressing and holding the Menu key on the Commander while pressing the volume minus local key on the TV.

2. Description of Information available

The following information is available from the Customer Service Menu:

Customer Service Menu		
1	Model	32HQ100
2	Chassis	AE7A
3	M2 SW Version	RELEASE_M2_V040
4	MIPS SW Version	0.00/0
5	TM SW Version	0.00/0
6	BTM SW Version	0.06/0
7	Picture Mode	Unavailable
8	Contrast Level	53
9	Colour Level	31
Next Page: Previous Page: Page 1/4		

Customer Service Menu		
10	Brightness Level	18
11	Sharpness Level	31
12	Noise Reduction	Auto
13	Auto Format	On
14	Colour Tone	Normal
15	I-Clear	On
16	I-Black	Off
17	Format Correction	On
18	Sound Effect	Personal
Next Page: Previous Page: Page 2/4		

Customer Service Menu		
19	Audio Type	Sharp
20	Speaker Volume	0
21	Headphone Volume	12
22	Speaker Balance	-26
23	AFT	Off
24	Analogue Frequency	679250000
25	Digital Frequency (Hz)	Unavailable
26	TV System	I
27	Colour System	PAL
Next Page: Previous Page: Page 3/4		

Customer Service Menu		
28	Error 1	No Error
29	Error 2	No Error
30	Error 3	No Error
31	Error 4	No Error
32	Error 5	No Error
Next Page: Previous Page: Page 4/4		

AE-7A SELF DIAGNOSTIC SOFTWARE

Error diagnostics are used to diagnose if parts of the chassis are faulty. Some errors can be safety critical. In this case the TV set is put into standby.

An error is communicated by:

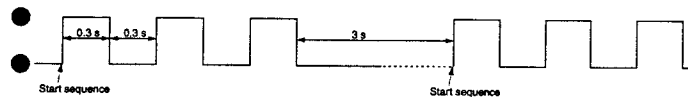
- Flashing the LED red at the front of the TV
- Via the error monitor service menu
- Via the Customer Service Menu (CSM)
- Via an external error reader connected to the service connector

1. LED Errors

The most important errors are signalled via this method.

This is also the only way that safety critical errors can be communicated since the TV will be in standby.

The LED sequence below is an example of Error Code 3. An error is determined by the number of short red flashes of the LED in between a longer solid green LED indication.



The following table displays the supported error codes.

LED ERROR CODE	ERROR DESCRIPTION	PRIORITY
01	Not used for error notification as it is already used for SIRCS acknowledge	Highest
02	OCP (Over Current Protection)	
03	OVP (Over Voltage Protection)	
04	Vertical Protection	
05	Unstable AKB(check starts after 30s,disabled in Production Mode)	
06	Horizontal Protection	
07	AUP (Speaker Protection)	
08	I2C Viper Bus 0 Error	
09	I2C Viper Bus 1 Error	
10	I2C M2 Bus 0 Error	
11	I2C M2 Bus 1 Error	
12	M2 NVM Error	
13	Viper NVM Error	
14	Viper Flash Memory Error	
15	N Board Error	
16	A Board Error	
17	B Board Error	
18	J Board Error	
19	A1 Board Error (CXD2099 - Common Interface)	
20	Backend (CXA2170)	
21	Analogue Colour Decoder (CXA2163)	
22	Main Digital Colour Decoder (SAA7118)	
23	Sound Processor (MSP3411G)	Lowest

LED code 1 has the highest priority.

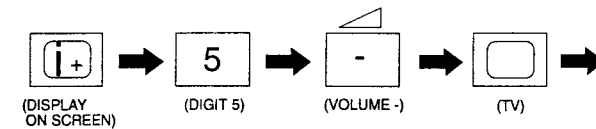
Errors found corresponding to LED error codes 2-4 will put the TV into standby under all conditions.

However, an error corresponding to LED error code 5 (Unstable AKB) will only put the TV into standby in service mode – the LED will flash in production mode without the TV going into standby.

2. Error Monitor Menu

The error monitor is displayed by:

- Entering TT command TT99, or
- Executing the following key sequence when the TV set is in standby:



The error monitor displays the following information:

- The last 5 errors that are stored in flash
- The current error
- The operating time of the TV set

Error detection can also be enabled or disabled from this menu.

Error Monitor

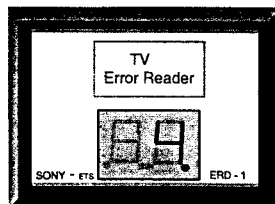
Error Detection	On
Error 1	No Error
Error 2	No Error
Error 3	No Error
Error 4	No Error
Error 5	No Error
Operating Time	
Hours	000013
Mins	30
Up: [Up Arrow]	Down: [Down Arrow]
Back: [Back Arrow]	Edit: [Edit Arrow]
Page 1/1	

The following error messages are displayed in the error monitor. The error code is displayed in the external error reader.

Error Code	Error Message
000h	No Error Occured
001h	Bus Error, I2C0 M2
002h	Bus Error, I2C1 M2
003h	Bus Error, I2C0 Viper
004h	Bus Error, I2C1 Viper
100h	N-Board
101h	N-B. SAA7118, Main Col Dec
102h	N-B. SAA7118, Sub Col Dec
103h	N-B. PNX8510, Anabel
104h	N-B. Viper EEPROM
105h	N-B. ME ASIC
106h	N-B. ICIB ASIC
107h	N-B. PCF8574, Port Exp
108h	N-B. ST24C32, M2 NVM
200h	A-Board
201h	A-B. TU1100, Main ana. Tuner
202h	A-B. TU1100, Main ana. IF
203h	A-B. TU1200, Sub ana. Tuner
204h	A-B. TU1200, Sub ana. IF
205h	A-B. CXA2170, Backend
206h	A-B. CXA8070, Dyn. Conv.
207h	A-B. MB88141, Defl. DAC
208h	A-B. CXA2171 Video Switch
209h	A-B. CXA1875, Port Exp.
20Ah	A-B. MSP3411G, Sound Proc.
20Bh	A-B. PFC8593, RTC
20Ch	A-B. TU4100, Dig Tuner PLL
20Dh	A-B. TU4100, Dig COFDM
20Eh	A-B. PCF8574, Port Exp
300h	B-Board
301h	B-B. CXA2163, Ana Col Dec
302h	B-B. CXD3084, 3D Comb
400h	J-Board
401h	J4-B. CXA1855, Main AV Switch
402h	J4-B. CXA2149, Sub AV Switch
500h	F-Board / CXD2088 AV Link
600h	A1-Board / CXD2088, Comm Int

3. Error Reader Display

If no menu can be shown, the Error Reader can display the current error. The error reader display is connected to the service connector to read actual error codes. The part number for the error reader display is S-188-900-10. Once an error has been detected it will then be displayed on the two digit error reader. The errors displayed refer to the above table.



Due to the limited count of digits the Error Reader displays the message sequentially. The following example shows the definition of this sequence:

- Start new error sequence [.]
- Display of 1st error part 1 [4 .]
- Display of 1st error part 2 [0 1 .] Error Code = 401h
- Display of 2nd error part 1 [6 .]
- Display of 2nd error part 2 [0 1 .] Error Code = 601h

The operating instructions mentioned here are partial abstracts from the 'Operating Instruction Manual'. The page numbers of the 'Operating Instruction Manual' remain as in the manual.

5 Automatically tuning the TV

- When you switch on the TV for the first time, the Sony logo appears on the TV screen followed by the 'Memory Stick' logo, then the Language/ Country menu with the word 'English' highlighted. Press the \blacktriangle or \blacktriangledown buttons on the remote control to choose the language you require then press the OK button to confirm.
- The word Country is now highlighted. Press the \blacktriangle or \blacktriangledown buttons to choose the country in which you are using the TV. It is important to select the correct country to ensure correct Teletext displays. Press the OK button to confirm your choice.

The picture rotation prompt appears. Sometimes the Earth's natural magnetism can cause the screen to look tilted.

- If no correction is required, press the \blacktriangle button.
- If some correction is required, press the OK button. Press the \blacktriangle or \blacktriangledown button to rotate the picture over a range of -5 to +5. Press the OK button to store.

The picture centering prompt appears (KV-36HQ100 model only). This allows you to adjust the vertical position of the display if it is not centralised.

- If no correction is required, press the \blacktriangle button.
- If some correction is required, press the \blacktriangle or \blacktriangledown button to set new position. Press the OK button to store.

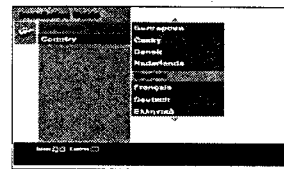
The autotune prompt screen appears. Press the OK button to select Yes. The autotune procedure begins, tuning all the available channels. A display then appears on the TV screen to inform you of the tuning progress.

If no channels are found, a display appears on screen asking you to confirm your aerial is connected. Check the aerial has been connected correctly then press the OK button to repeat the tuning process.

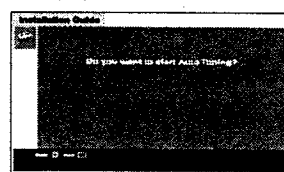
Once all signals have been captured and stored, the TV returns to normal operation and displays the analogue programme captured on programme number 1.

- To view programmes, press the PROG+/- button or the numbered buttons on the remote control.

Language/Country menu



Autotune prompt



6 Finding your video channel

If you connected a VCR to your TV when following the 'Connecting an aerial and a VCR to the TV' instructions, you now need to find your video channel.

- Press the PROG+/- button on the remote control until the picture from the pre-recorded tape appears on screen.

Notes:

If you wish to move your video channel to a different programme number, refer to 'Programme List Edit' on page 20.

If you have connected your VCR using a scart lead, press the \square/\boxplus button repeatedly on the remote control until the picture from the pre-recorded tape appears on the TV screen.

NexTVView

The NexTVView menu provides a quick and easy way to:-

- View a complete list of the programmes available.
- View a list relating to a category of programme, e.g. Sports or Movies.
- Set a programme to be recorded.

- Press the \square button to display the NexTVView screen. This screen consists of an event information area, a 2 hour timer bar (divided into 30 minute intervals) and a 7 channel programme list covering the 2 hour period.
- Press the \blacktriangle or \blacktriangledown buttons to move the cursor bar up or down the programme list and the \blacktriangle or \blacktriangledown buttons to move left and right. If you press the \blacktriangle button once more after highlighting the last programme on the right, the programmes scheduled for the next 2 hour period are displayed. As each programme is highlighted, a brief description of the programme appears in the event information area at the top of the screen. If you do not wish to select a programme from the 7 channels listed, press the GREEN button to display the next group of channels or the RED button to display the previous group of channels (if more than 7 channels are available).
- When the programme you want to view is highlighted, press the OK button to exit the NexTVView menu and view the programme.

Selecting a category of programme

The Category list allows you to search for programmes quickly by dividing the channels into different categories. For example, if you select 'News' from the Category list, then only programmes related to News will be shown in the NexTVView menu.

- With the NexTVView menu on screen, press the BLUE button to display the Category display. This display contains icons representing categories such as sport and news.
- Press the \blacktriangle , \blacktriangle , \blacktriangle or \blacktriangle buttons to highlight the category icon you want, then press the OK button. The NexTVView programme list will now only contain programmes related to the category type selected.

The category types are as follows:

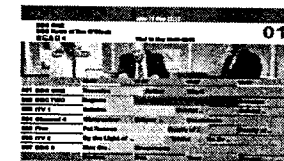
Icon	Category
	Displays all programme types
	Displays programmes you have stored as favourites
	Displays childrens programmes
	Displays all entertainment programmes
	Displays all movie programmes
	Displays all sports programmes
	Displays all news programmes
	Displays all music programmes
	Displays all arts programmes

- Press the \blacktriangle , \blacktriangle , \blacktriangle or \blacktriangle buttons to highlight the programme you wish to view from the new list, then press the OK button to view.

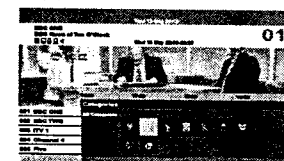
Note:

If you choose a category other than 'All Programmes' or 'Favourites', it will not be stored when the TV is switched off, and will have to be selected again when the TV is next turned on.

NexTVView menu



Category list



NextView

Selecting a programme for recording or timed display

With the NextView menu displayed press the \uparrow , \downarrow , \leftarrow and \rightarrow buttons to highlight a future programme, then press the YELLOW button to display the 'Timer' pop-up menu. This option allows you to choose from a) Timer REC, b) Wake up or c) Manual timer.

a) Record

Highlight 'Timer REC' and press the OK button to automatically set your VCR to record the selected programme.

Notes:

This option only works if your VCR has SMARTLINK capability and it is connected to the AV3 SMARTLINK VCR, a message will tell you to set the timer recording function of your VCR so that it switches on and off to correspond with the programme you have stored for recording.

When a programme has been set for recording, a solid red bar appears under the timer bar in the menu, and the record symbol REC appears in the display. The coloured bar shows the time allocated for recording and reminds you that you are unable to record other programmes during that time period.

Once a recording has begun you can put the TV into its standby mode, but do not switch off completely or the recording will be cancelled.

b) Reminder

Highlight 'Reminder' and press OK if you wish the future programme you selected to automatically appear on screen when transmission starts. When you use this option a solid green bar appears under the timer bar in the menu and the timer symbol O appears in the display. This coloured bar indicates that a 'Reminder' request has been activated. If you are watching another programme just before the transmission is due to begin, the TV will automatically switch to the 'Reminder' programme.

Note:

If you have placed the TV into standby, it will automatically turn itself on when the 'Reminder' programme is about to start. If the TV receives no command during the 'Reminder' programme, it will return to the standby mode.

c) Manual

Highlight 'Manual' and press OK if you wish the TV to output a channel to your VCR for recording when the transmission begins. The Manual Timer display appears.

Press the \uparrow or \downarrow button to set the day of recording, then press the \rightarrow button to move to the start time. Repeat this procedure to set the start and stop times and the channel number, then press the OK button to store and return to the NextView menu. Press the TV button to remove the NextView menu. Unless you have a SMARTLINK VCR, you must now set the timer recording function of your VCR to switch on and off to correspond with the programme you have stored for recording.

Notes on recording:

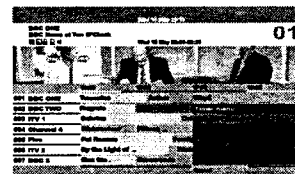
The 'Manual' feature only works if you have connected your VCR to the AV3 socket G-3/33 on the rear of the TV. After you have programmed a recording you can put the TV into its standby mode, but do not switch off completely or the recording will be cancelled. If you put the TV into standby mode, the standby indicator on the front of the TV flashes green periodically to remind you a recording has been programmed.

Timer list

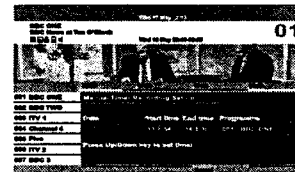
The Timer pop-up menu also has a 'Timer list' option. If you highlight this and press the OK button, a screen is displayed showing all the programmes you have set for recording or wake up. To delete one of these programmes, proceed as follows:

1. Press the \uparrow or \downarrow button to highlight the programme you wish to delete.
2. Press the OK button to confirm deletion.
3. Press TV when you wish to return to normal TV operation.

Timer pop-up display



Manual timer display



Text

Most TV channels provide a text service. The index page (usually page 100) provides information on how to use the service. Please ensure you are receiving a strong signal or some text errors may occur.

Viewing Text

1. Select the TV channel that carries the text service you wish to view.
2. Press the PT button to enter Picture and Text (P&T) mode. The screen is divided into two with the Text display on the left and the TV channel in the right corner.

Notes:

If you wish to view the Text in full screen mode, press the PT button a second time.

3. Press the numbered buttons to enter a three digit number for the text page you wish to view. Your selected page appears on screen.
4. Enter more 3 digit page numbers as required.
5. Press the \square button on the remote control at any time to exit Text mode.

Text display



How to use Text features

To select the next or preceding page	Press the TV or PA button.
To select a sub page	A text page can consist of several sub pages. In this case an information box is displayed at the bottom of the screen showing the number of sub pages available. Select the sub pages by pressing the \uparrow or \downarrow button.
To keep a page on display	Press the PT button. Press again to cancel.
To use Fastext	Fastext allows you to access pages with one button push. When Fastext is available, four coloured items appear at the bottom of the screen. Press the corresponding coloured button on the remote control to display the page.
To use the Page Catching feature	Select a page that contains several page numbers (e.g. the index page), then press the OK button. Press the \uparrow or \downarrow button to highlight the page number required, then press the OK button again. Your selected page appears on screen.
To use the Reveal function	Press the PT button to reveal hidden information on the page (such as answers to a quiz).

Viewing Top-Text


If transmitted by the broadcasting authorities, Top-Text can be viewed on this TV. When Top-Text is displayed, the screen is divided into two columns, the first column shows 'blocks' of pages and the second shows 'groups' of pages.

1. Press the \uparrow or \downarrow button to highlight the first or second column.
2. Press the \uparrow or \downarrow button to select the relevant 'group' or 'block' of pages.
3. Press the OK button to display the chosen pages.
4. Press the \square button when you wish to exit Top-Text.

Memory Stick


A 'Memory Stick' is a new recording medium with a data capacity that exceeds a floppy disk. It is specially designed for exchanging and sharing digital data among 'Memory Stick' compatible products. Use 'Memory Stick' to display JPEG pictures (DCF version 1.0 format)** individually or as a slideshow presentation on the TV screen. Because it is removable, 'Memory Stick' can also be used for external data storage.

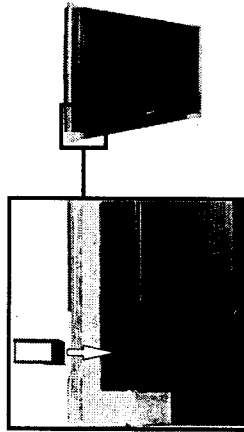
Notes:

*'Memory Stick' and the  logo are trademarks of Sony Corporation.

**DCF (Design rules for Camera File systems) is a standard file name format for digital still cameras, DV camcorders etc. It is supported by Sony and other manufacturers.

Inserting a 'Memory Stick'

Insert a 'Memory Stick' into the front control panel of the TV set until it clicks into the connector. The side showing the  symbol must be facing you and it must be pointing towards the 'Memory Stick' socket. The red light flashes indicating that the 'Memory Stick' contents are being read.

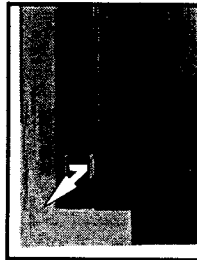


Removing a 'Memory Stick'


Confirm that the red light is off. Do not pull the 'Memory Stick'. You must push the 'Memory Stick' and then release. The 'Memory Stick' will spring out.

Note:











*Data stored on a 'Memory Stick' may become damaged or erased if you remove the 'Memory Stick' when it is reading or writing data.



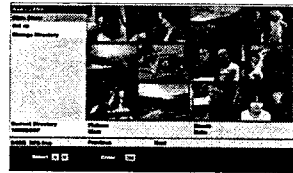
The 'Memory Stick' Thumbnail menu

Press the  button to display the Thumbnail menu. This screen gives an overview of the 'Memory Stick' content. From this menu you can also choose to see a slide show of the content, change the directory (if the 'Memory Stick' contains more than one directory), and change settings related to the viewing operation.

To view a picture

1. Press , ,  or  buttons to highlight the picture you wish to view. There may be more pictures available than can be shown on the Thumbnail screen. If so, press the RED button to view the next group of pictures, or the GREEN button to view the previous group.
2. When you have selected the picture you want, press the OK button to display the Thumbnail 'Action List'. The picture you have selected for viewing will be outlined.
3. The option 'Full Screen View' should now be highlighted. Press the OK button to view the selected picture at full size. Whilst the picture is displayed at full size, you can select the next or previous picture for viewing by pressing the  or  buttons.
4. If you wish, you can rotate the picture on view 90 degrees clockwise or anti-clockwise. Press the  or  button to highlight  or  symbol, then press the OK button.
5. To return to the Thumbnail menu, first press the OK button to display the full screen 'Action List'. Make sure 'Exit Full Screen View' is highlighted, then press the OK button once again.





Thumbnail menu



Memory Stick








Slideshow

This feature allows you to display all the 'Memory Stick' pictures as a slideshow presentation on the TV screen.

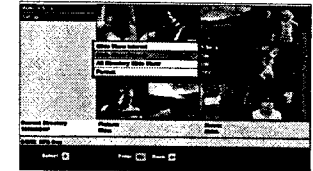
1. With the Thumbnail menu on screen, press the , ,  or  buttons to highlight 'Slide show' then press the OK button.
2. The slideshow begins. (To change the length of time an image is displayed refer to the 'Setup' section below).
3. Press the OK button anytime during the slideshow to return to the 'Thumbnail' menu.







Setup

This feature allows you to 1) set the length of time for a picture to be displayed during a slideshow, 2) set a slideshow to continuously repeat, 3) display photographs from all directories) format the 'Memory Stick'.

1. With the Thumbnail menu on screen, press the , ,  or  buttons to highlight 'Set-up' then press the OK button to display the Set up menu.
2. Press the  or  button to highlight the option you require. The table below explains each option and its function.
3. Press the  button to return to Thumbnails once all settings are completed.







Set-up menu



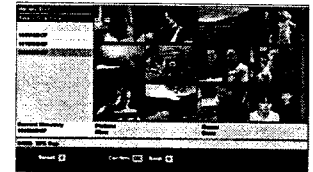
Slide show interval Sets the length of time a picture is displayed during a slideshow.	With 'Slide show interval' highlighted, press the OK button to activate. Press the  or  button to select 5 sec, 10 sec, 1 min, 5 min or 15 min, then press the OK button to store your choice.
Slideshow - Repeat Sets a slideshow to continuously repeat.	With 'Slide show repeat' highlighted, press the OK button to activate. Press the  or  button to select 'On' or 'Off' then press the OK button to confirm.
All directory slide show Displays photographs from all the available directories during the slideshow.	Highlight 'All directory slides show' then press the OK button to activate. Press the  or  button to select 'On' or 'Off' then press the OK button to store your choice.
Format Will delete all information on the 'Memory Stick' and performs a basic format.	Highlight 'Format' then press the OK button to begin formatting. A message display appears asking you to confirm you want to format the 'Memory Stick'. 'Format' will be highlighted. Press the OK button to continue. A display will inform you when format is completed. Press the OK button to return to the Set-up menu.

Changing Directory

This feature allows you to choose the directory that you wish to be displayed in the Thumbnail menu.

1. With the Thumbnail menu on screen, press the , ,  or  buttons to highlight 'Select Directory' then press the OK button.
2. A directory list appears in the display.
3. Press the  or  buttons to select your desired directory, then press the OK button. The photographs from that directory will now be displayed in the Thumbnail menu.

Directory list



TV menu system

Using the TV menu system

This TV contains a menu system which is based on a series of on screen displays. These displays help you get the most from your TV, from customising the picture and sound to accessing advanced features. Use the following buttons on the remote control to operate the TV menu system:

1. Press the **MENU** button to display the main menu.
2. Use the following buttons to operate the menu:
 - Press the \blacktriangle or \blacktriangledown buttons to highlight the required menu or option.
 - Press the \rightarrow button to enter the required menu or option.
 - Press the \leftarrow button to return to the last menu or option.
 - Press the \blacktriangle , \blacktriangledown , \rightarrow or \leftarrow buttons to alter the settings of the selected option.
 - Press the **OK** button to confirm and store your selection.
3. Press the **MENU** button to remove the menu from the TV screen.

Picture Adjustment menu

This menu allows you to customise the TV picture settings. Highlight the required option and press \rightarrow to select. The table below explains each option and how to use it.

Picture Mode

This option allows you to select one of four picture modes. Press \blacktriangle or \blacktriangledown to select Live, Personal, Movie or Game. Press **OK** to confirm your choice.

Contrast, Brightness, Colour, Sharpness, Hue

These options allow you to adjust the contrast, brightness, colour and sharpness. Press \blacktriangle or \blacktriangledown to set the levels. Press **OK** to confirm.

Note:

Hue will only be available if an NTSC broadcast is received.

Reset

This option resets all picture settings to the factory preset levels. Press \blacktriangle to restore default picture settings.

Note:

This feature is only available when 'Picture Mode' is set to 'Personal'.

Noise Reduction

Sometimes a weak signal can produce a snowy picture (called Picture Noise). This option can help to reduce this effect. Press \blacktriangle or \blacktriangledown to select Off, Low, Mid, High or Auto. Press **OK** to confirm.

Colour Tone

This option allows you to alter the tint of the picture. The settings available are:

Warm: Gives the white colours a red tint.
Normal: Gives the white colours a neutral tint.
Cool: Gives the white colours a blue tint.

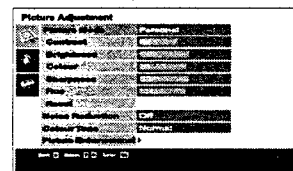
Press \blacktriangle or \blacktriangledown to select Warm, Normal or Cool. Press **OK** to confirm.

Picture Enhancement

With this option you can enhance the sharpness and contrast levels of the TV picture. The settings available are:

i-Clear: Optimizes the sharpness levels of the TV picture. Press \blacktriangle or \blacktriangledown to select Off, Low, Mid or High. Press **OK** to confirm.
i-Black: Optimizes the contrast levels of the TV picture. Press \blacktriangle or \blacktriangledown to select On or Off then press **OK** to confirm your choice.

Picture adjustment menu



TV menu system

Set-up menu

This menu gives you access to more advanced features. The options are:

Language/Country

When you first installed the TV you were asked to select your language and country. The 'Language/Country' option in this 'Set-up' menu allows you to change these settings. With the 'Language/Country' option highlighted, press \blacktriangle to enter the 'Language/Country' menu. Press \blacktriangle or \blacktriangledown to select 'Language' or 'Country'. Press \rightarrow to select. Press \blacktriangle or \blacktriangledown to highlight the required setting. Press **OK** to confirm.

Auto Tuning

All the available channels were tuned in when the TV was first installed. This 'Auto Tuning' option allows you to repeat that process (e.g. to re-install the TV at an alternative location or search for new channels that have been launched by broadcasters). With the 'Auto Tuning' option highlighted, press \blacktriangle to select. The autotune prompt appears on screen. Press **OK** to start the auto tuning process. When all available channels have been tuned the TV returns to normal operation.

Programme List Edit

This option allows you to change the order in which the channels are stored on the TV and delete unwanted channels. With the 'Programme List Edit' option highlighted, press \blacktriangle to enter the 'Programme List Edit' menu. Press \blacktriangle or \blacktriangledown to highlight the channel you wish to move to a new position, then press \rightarrow to select (press the **OK** button if you wish to delete the channel). Press \blacktriangle or \blacktriangledown to highlight the new position for your channel, then press **OK** button. Your chosen channel has now moved to the new position. Repeat to move other channels if required.

Manual Tuning

This option allows you to manually tune in channels. With the 'Manual Tuning' option highlighted, press \blacktriangle to enter the Manual Tuning menu. Press \blacktriangle or \blacktriangledown to highlight the programme number you wish to tune. Press **OK** to confirm, and display the setting screen. Press \blacktriangle or \blacktriangledown to highlight System, then press the \rightarrow button. Press \blacktriangle or \blacktriangledown to set the system required. Choose from system B/G or D/K. Press the \rightarrow button. Press \blacktriangle button to highlight Channel and press the \rightarrow button. Press \blacktriangle or \blacktriangledown to choose 'C' for terrestrial or 'S' for cable channels. Press the \rightarrow button. The channel number is highlighted.

- (a) If you know the channel number you want: Press the numbered buttons on the remote control to enter the channel number. Press **OK** to store.
- (b) If you do not know the channel number: Press \blacktriangle or \blacktriangledown to **SEARCH**. The TV set automatically searches for the next available TV broadcast channel or the VCR test signal. When a channel has been found press either **OK** to store or \blacktriangle or \blacktriangledown to continue searching.

Naming a channel

The 'Label' option allows you to give the channel a personalised name.

- a) Press \blacktriangle or \blacktriangledown to highlight 'Label' then press the \rightarrow button to enter.
- b) Press the \blacktriangle or \blacktriangledown button to select the first letter or number of your choice. Press \rightarrow button to confirm. Select remaining characters in this way, then press the **OK** button to store.

AFT (Automatic Fine Tune)

This option allows you to fine tune the channel for optimum result.

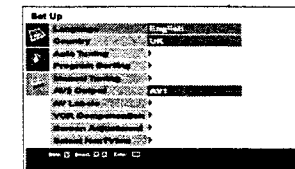
- a) Press the \blacktriangle or \blacktriangledown button to highlight 'AFT' then press the \rightarrow button to enter.
- b) Press the \blacktriangle or \blacktriangledown button to adjust the tuning frequency over a range of -15 to +15. Press the **OK** button to store.

Decoder

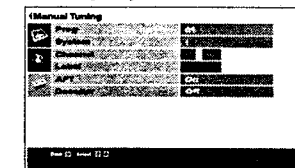
This option allows you to set a channel for viewing scrambled signal (e.g. from a pay TV decoder).

- a) Press \blacktriangle or \blacktriangledown to highlight 'Decoder' then press the \rightarrow button to enter.
- b) Press \blacktriangle or \blacktriangledown to select AV1 or AV3 depending on which socket your scrambled signal is connected to. Press the **OK** button to store.

Set-up menu




Manual tuning setting screen








Additional information

Teaching the remote control*

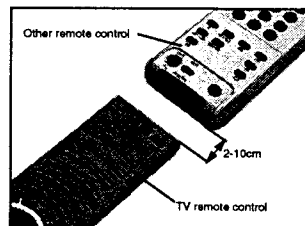
To eliminate the amount of remote controls you need, this remote control has a learning feature. Once set up as explained below, it can be used in place of your other remote controls.


1. Press and hold the  button for approximately six seconds, until the 'AUX' light flashes.
2. Press the button on which you wish to store a learned function on. The VCR, TV, DVD and AUX lights flash in order.

The following buttons can be used to store learned functions:




VIDEO  button	Numbered buttons
    buttons	OK button
Coloured buttons	Menu button
Prog +/- buttons	

*The functions learned may be lost if weak batteries are not replaced immediately.







3. Position the other remote control as shown. Press the button that you wish to teach your TV remote control. The VCR, TV, DVD and AUX lights illuminate at the same time when a function has been learned and stored.
4. Repeat steps 2 and 3 to learn other functions.
5. Press the  button to finish.

Erasing the last learned function

1. Press and hold the  button for approximately six seconds, until the 'AUX' light flashes.
2. Press the  button to erase the last learned function.
3. Press the  button to return to normal operation.

Erasing all the learned functions

1. Press and hold the  button for approximately six seconds, until the 'AUX' light flashes.
2. Press the  and  buttons to erase all learned functions.
3. Press the  button to return to normal operation.

Additional information








Specifications

TV System	B/G/H, DK, I, L
Colour System	PAL, SECAM NTSC 3.58, 4.43 (only Video In)
Channel Coverage	VHF: E2-E12 UHF: E21-E69 CATV: S1-S20 HYPER: S21-S41 D/K: R1-R12, R21-R69
Picture Tube	KV-32HQ100K: Super Fine Pitch FD Trinitron Approx. 82cm KV-36HQ100K: Super Fine Pitch FD Trinitron Approx. 91cm
Sound Output	Left/Right: 2x20W (music power), 2x10W (RMS) Subwoofer: 1x30W (music power), 1x15W (RMS)
Power Consumption	KV-32HQ100K: Approx. 180W KV-36HQ100K: Approx. 160W
Dimensions (w x h x d)	KV-32HQ100K: Approx. 1015 x 575 x 590mm KV-36HQ100K: Approx. 1100 x 625 x 620mm
Weight	KV-32HQ100K: Approx. 68kg KV-36HQ100K: Approx. 78kg
Rear Terminals	<div> <div>⊖1</div> <div>21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output.</div> </div> <div> <div>⊖2</div> <div>21-pin Euro connector (CENELEC standard) including audio/video input, RGB input, TV audio/video output</div> </div> <div> <div>⊖3/⊖33</div> <div>21-pin Euro connector (CENELEC standard) including audio/video input, S-video input, selectable audio/video output.</div> </div> <div> <div>⊖4/⊖44</div> <div>21-pin Euro connector (CENELEC standard) including audio/video input, S-video input.</div> </div> <div> <div>1f</div> <div>RF In</div> </div> <div> <div>⊖5</div> <div>Audio output - RCA phono jacks</div> </div>
Side Terminals	<div> <div>⊖5</div> <div>Video input - phono jack</div> </div> <div> <div>⊖5</div> <div>S video input - 4 pin DIN</div> </div> <div> <div>⊖5</div> <div>Audio inputs - phono jacks</div> </div> <div> <div>⊖</div> <div>Headphones jack - minijack stereo</div> </div>
Accessories Supplied	RM-940 remote control (1) IEC designated size AA battery (2)

Design and specification are subject to change without notice

Additional information

Troubleshooting


Problem	Possible causes	Solutions
No picture, no sound.	<ul style="list-style-type: none"> Power off TV in standby. Aerial disconnected. 	<ul style="list-style-type: none"> Plug in the TV. Press the  button on the front of the TV. If the indicator is on press the  button on the remote control. Check aerial connection
Poor or no picture (screen is dark), but good sound.	<ul style="list-style-type: none"> Picture preset level adjustment 	<ul style="list-style-type: none"> Select 'Picture Adjustment' menu then adjust the brightness, picture and colour levels.
Some channels are blank.	<ul style="list-style-type: none"> Scrambled or subscription-only channel. Programme used only for data (no picture or sound). Programme not being transmitted. 	<ul style="list-style-type: none"> Subscribe to pay-per-view broadcaster. See 'Skipping a programme' section. See 'Re-arranging your channels' section.
Standby indicator flashing.	<ul style="list-style-type: none"> Fault (irregular flash) 	<ul style="list-style-type: none"> Do not open the cabinet, refer to qualified personnel. Contact your nearest SONY Service Centre.
Good picture, no sound	<ul style="list-style-type: none"> Volume control. 	<ul style="list-style-type: none"> Press the  + button on the remote control. If  is displayed on the screen, press the  button on the remote control.
No colour on colour programmes	<ul style="list-style-type: none"> Colour level setting. 	<ul style="list-style-type: none"> Select 'Picture Adjustment' menu then adjust the colour setting.
Remote control does not function	<ul style="list-style-type: none"> Batteries low. Wrong mode 	<ul style="list-style-type: none"> Replace batteries. Press the  or  button to check if your remote control is in the correct Mode for the equipment you are trying to control.
Distorted picture when changing programmes or selecting teletext	<ul style="list-style-type: none"> Inputs from external equipment not switched off. 	<ul style="list-style-type: none"> Switch off all additionally connected equipment.

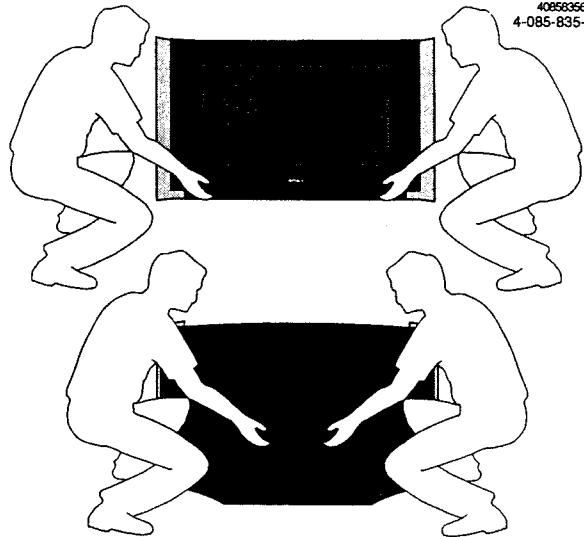
- If you continue to have these problems, have your TV serviced by qualified personnel .
- NEVER open the casing yourself.

Lifting the TV Set

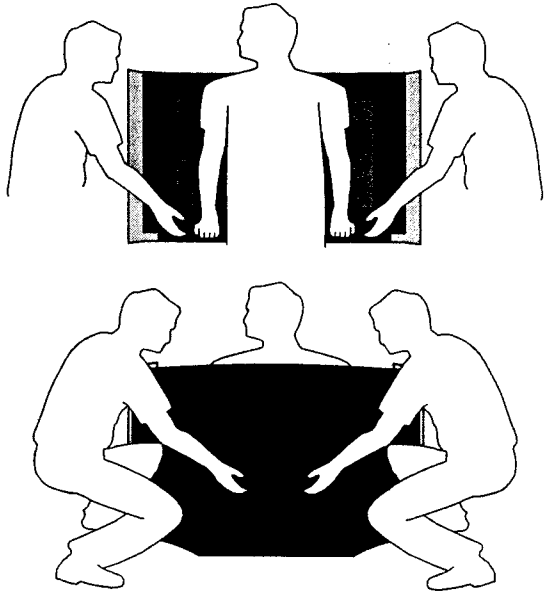


406583561
4-085-835-61(01)

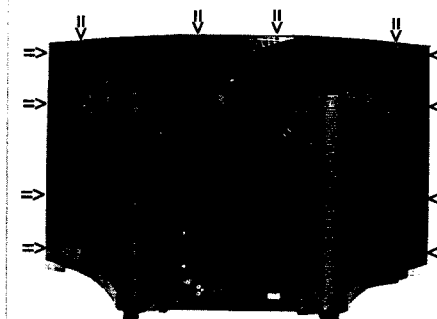
 =KV-32HQ100



 =KV-36HQ100

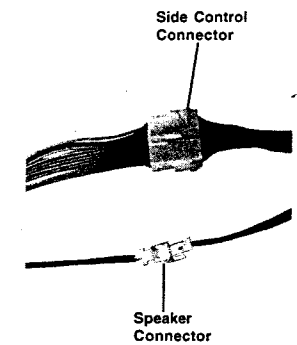


2-1. Rear Cover Removal



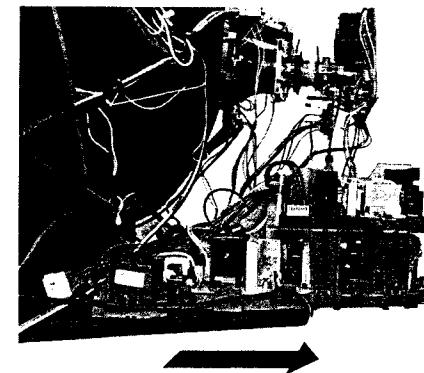
Remove the rear cover fixing screws indicated and pull the rear cover backwards away from the set. Take care when removing the rear cover not to damage the side control and speaker cables, [disconnect the side control and speaker connectors]. The side control and speaker is fitted inside the rear cover.

2-2. Side Control and Speaker Disconnection

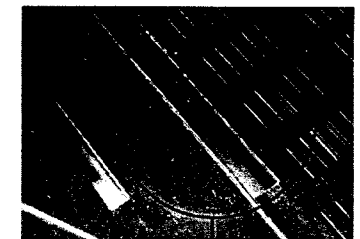


Before completely removing the rear cover disconnect the side control connector and speaker connector which is located on the inside of the set.

2-3. Chassis Removal and Refitting

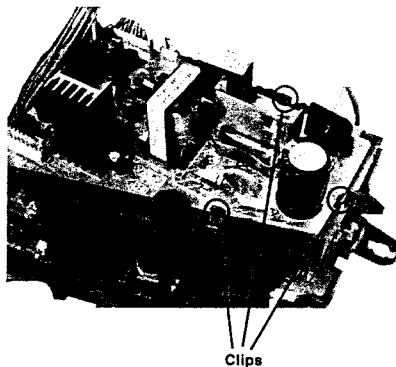


To remove lift the main bracket rear slightly and slide the chassis away from the bezel. Ensure that the interconnecting leads are released from their purse locks to prevent damage being caused.



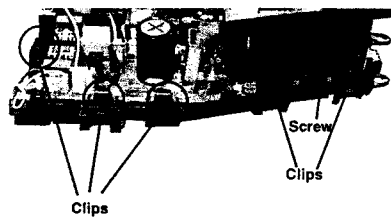
When refitting the chassis ensure that the main bracket is located in the bezel guide slots before sliding the chassis forwards. Refit the inter-connecting leads in their respective purse locks.

2-4. G1 Board Removal



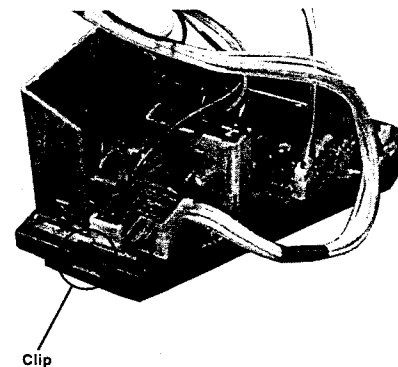
To remove the G1 board release the three clips circled and ease the board gently away from the support bracket.

2-5. G Board Removal



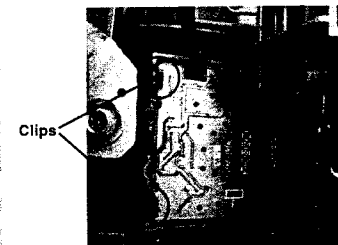
To remove the G Board first remove the G1 bracket by removing the screw circled and releasing the four clips (two on each side of the bracket). The G Board can then be removed by releasing the clips circled and easing the board gently away from the support bracket.

2-8. SF Board Removal



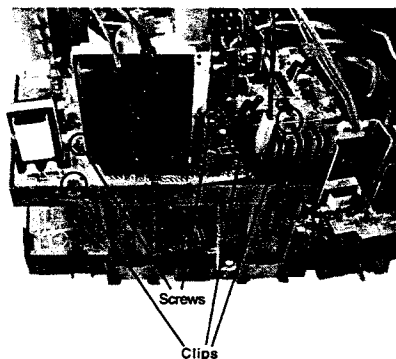
To remove the SF board release the clip circled and ease the board gently away from the support bracket.

2-9. MS3 Board Removal



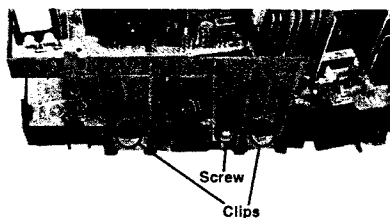
To remove the MS3 board release the two clips circled and ease the board gently away from the support bracket.

2-6. D2 Board Removal



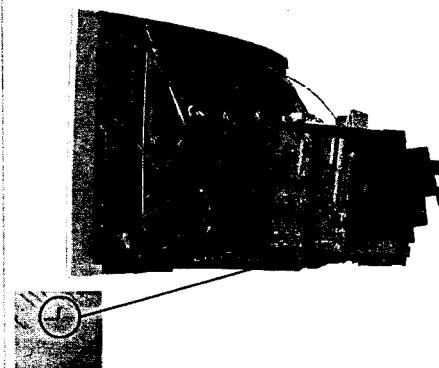
To remove the D2 board remove the two screws circled, release the clips circled and ease the board gently away from the support bracket.

2-7. D1 Board Removal



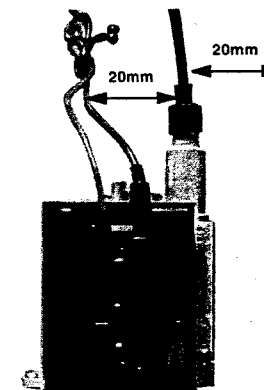
To remove the D1 board first remove the D2 bracket by removing the two screws (one on each side of the bracket) and releasing the four clips (two on each side of the bracket). The D1 board can then be removed using the same method as the G board.

2-10. Service Position



To place the chassis in the service position, remove the SF and MS3 boards from their brackets (see 2-8 and 2-9), remove the G1 and D2 brackets and position on the side of the main bracket as shown above. Insert the main bracket firmly into the T-slot located on the left corner of the beznet as indicated (see inset). To gain access to the underside of the boards follow the instructions on page 21. [Removal and Replacement of the main bracket bottom plates].

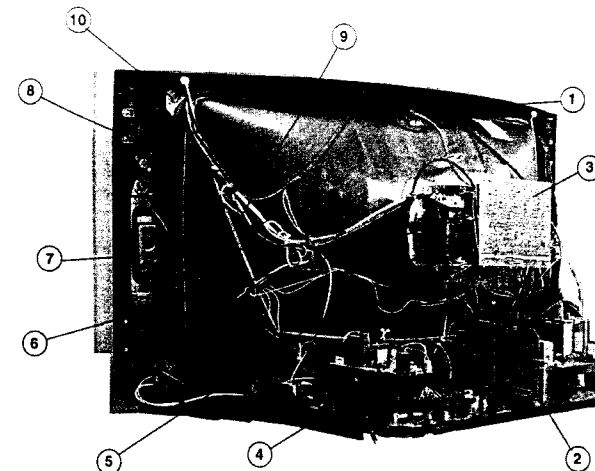
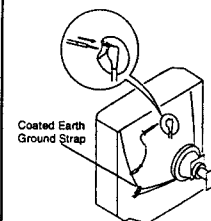
2-11. Wire Dressing



Ensure that wires do not touch heatsinks and high temperature hotspots. All wires must be kept at a minimum distance of 20mm away from the EHT lead

**WARNING:
BEFORE REMOVING
THE ANODE CAP**

High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT *before* attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the Deflection yoke, neck assy, degaussing coils and CRT grounding strap.
3. Remove the C2 Board from the CRT.
4. Remove the chassis assembly.
5. Loosen the Neck assembly fixing screw and remove.
6. Loosen the Deflection yoke fixing screw and remove.
7. Place the set with the CRT face down on a cushion and remove the Degaussing Coil holders.
8. Remove the Degaussing Coils.
9. Remove the CRT grounding strap and spring tensioners.
10. Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT.
[Take care not to handle the CRT by the neck.]

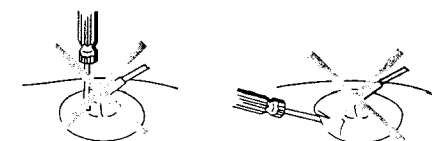
Removal of the Anode-Cap

REMOVAL PROCEDURE.

-
- ① Turn up one side of the rubber cap in the direction indicated by the arrow **a**
 - ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow **b**
 - ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow **c**

How to handle the Anode-Cap

1. To prevent damaging the surface of the anode-cap do not use sharp materials.
2. Do not apply too great a pressure on the rubber, as this may cause damage to the anode connector.
3. A metal fitting called a shatter hook terminal is fitted inside the rubber cap.
4. Do not turn the rubber foot over excessively, this may cause damage if the shatter hook sticks out.

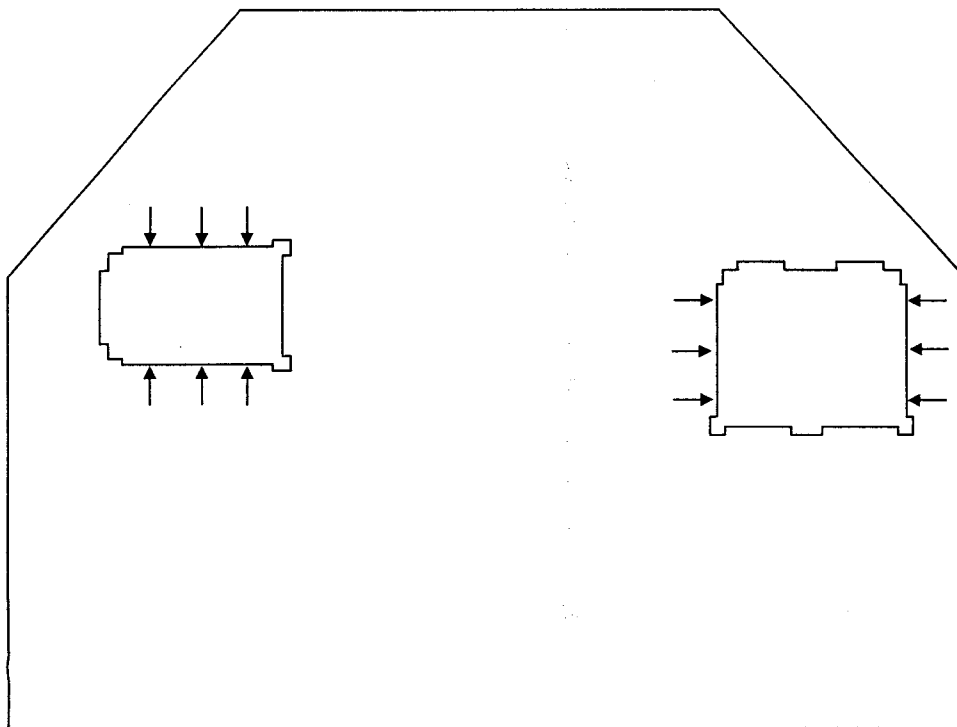


REMOVAL AND REPLACEMENT OF THE MAIN-BRACKET BOTTOM PLATES.

(1) REMOVING THE PLATES

In the event of servicing being required to the solder side of the printed wiring boards, the bottom plates fitted to the main chassis bracket require to be removed. This is performed by cutting the gates with a sharp wire cutter at the locations indicated by the arrows.

Note : There are 2 plates fitted to the main bracket.
Only remove the necessary plate to gain access to the printed wiring board.

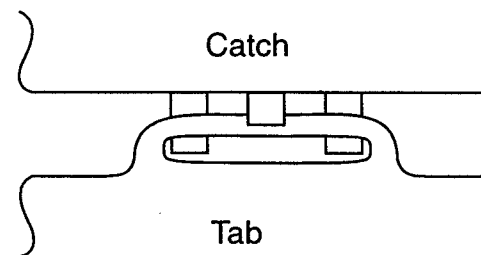


For safety reasons, on no account should the plates be removed and not refitted after servicing.

(2) REFITTING THE PLATES

Because the plates differ in size it is important that the correct plates are refitted in their original location.

Please note that the plates need to be rotated 180 degrees from their cut position to allow the tabs to be fitted into their catch positions.



SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there are specific instructions to the contrary, carry out these adjustments with the rated power supply.
- Unless there are specific instructions to the contrary, set the controls and switches to the following settings:

Contrast normal

Brightness normal

Carry out the adjustments in the following order:

- 3-1. Beam Landing and Geometry.
- 3-2. Convergence.
- 3-3. Focus.
- 3-4. White Balance.

Note: Test equipment required.

1. Color bar/pattern generator.
2. Degausser.
3. Oscilloscope.
4. Digital multimeter.
5. TT Commander

3-1. Beam Landing

Preparation:

- In order to reduce the influence of geomagnetism on the set's picture tube, face it in an easterly or westerly direction.
- Switch on the TV set's power and degauss with a degausser.

(1) Adjustment of Correction Magnet for Y-Splitting Axis.

- Input a crosshatch signal from the pattern generator.
- Set the Picture control to minimum and confirm that the Brightness control is set to normal.
- Position the neck assembly as indicated in Fig.3-3.
- Loosen the deflection yoke fixing screw.
- Move the deflection yoke as far forward as is possible.
- KV-36HQ100**
Adjust the upper and lower pin symmetrically by opening or closing the Y-splitting axis correction magnets located on the neck assembly. [See Fig 3-1]
KV-32HQ100
Enter the Deflection Service Menu as shown on page 30 and adjust VPIN_32.
- Return the deflection yoke to its original position and re-tighten its fixing screw.

Fig.3-1

Y-splitting axis correction magnet (KV-36HQ100)

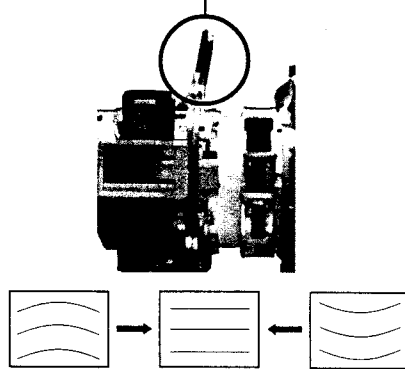


Fig.3-2

Caution:

High voltages are present on the Deflection yoke terminals - take care when handling the Deflection yoke whilst carrying out adjustments.

(2) Landing and Geometry

Note: Before carrying out the following adjustments adjust the magnets as indicated on page 23 [See Fig.3-4].

1. Input a crosshatch signal from the signal generator.
2. Rough-adjust the focus and horizontal convergence.
3. Switch from the crosshatch pattern to an all-red pattern.
4. Move the deflection yoke backwards and adjust with the purity magnet so that the red is at the centre and it aligns symmetrically [See Fig.3-5].
5. Move the deflection yoke forward to the point where the entire screen just becomes red [Mark its position].
6. Move the deflection yoke further forward until the screen just changes colour at the edges. [Mark its position].
7. Position the deflection yoke between the two marks indicated above.
8. Input a crosshatch pattern from the pattern generator and rotate the deflection yoke so that the horizontal lines are parallel with the top and bottom of the screen.
9. When the position of the deflection yoke has been determined, fasten it with its fixing screw.
10. Once dy rotation and swing left and right for h linearity is ok on cross hatch pattern, insert dy wedges. [See Fig.3-6].
11. Switch the pattern generator to green then blue and confirm the purity.
12. If the beam does not land correctly in all the corners of the screen, use SFC correction. (See Page 23)

Fig.3-3

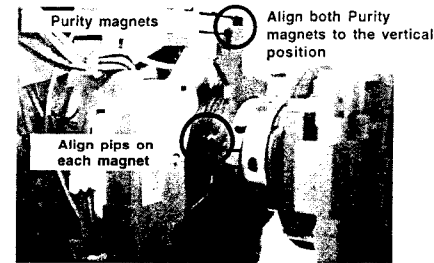
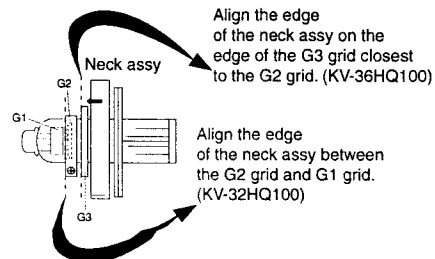


Fig.3-4

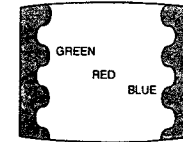


Fig.3-5

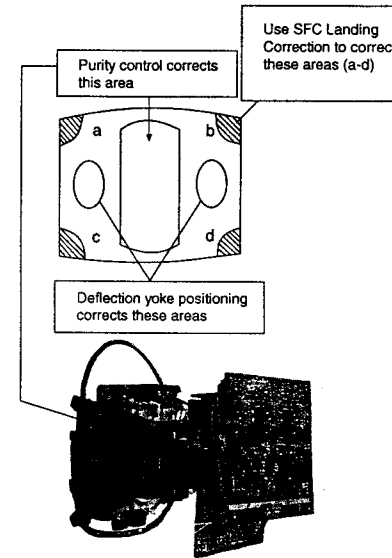
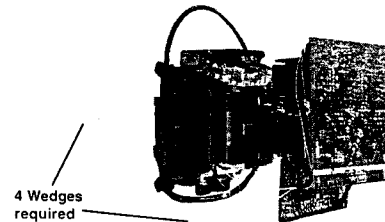
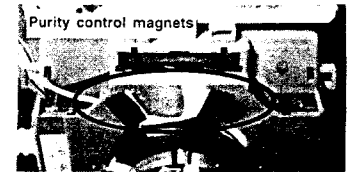


Fig.3-6

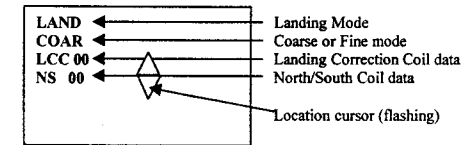


Note: A new DY spacer was used during manufacture of KV-36HQ100. If the DY is changed then the spacers on the CRT funnel can be used. If the CRT is changed then use standard DY spacer.



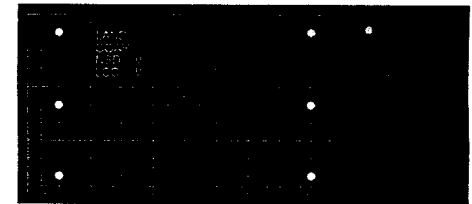
3-2. SFC Landing Correction

1. Use TT Commander to Obtain TT55
2. SFC Menu & Crosshatch pattern will appear. Press button '2' to toggle to Landing mode. Menu will appear as:



3. To adjust Landing, Choose Coarse or Fine mode by toggling button '9'.

COARSE MODE ADJUSTABLE LOCATION



*In Coarse Mode, all data will change equally for that particular side.

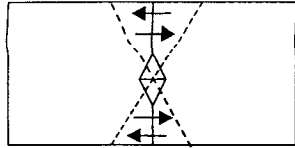
FINE MODE ADJUSTABLE LOCATION



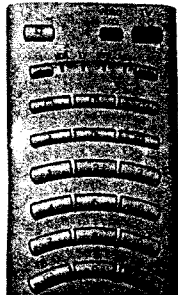
*In Fine Mode, data will change for that position only.

4. Use commander arrows to move flashing location cursor to required position for adjustment.
5. Choose required location by using arrow up, down, right, left on commander to move location cursor. (Cursor will start in centre position)
6. Edge locations only will adjust LCC coil data.
7. Centre point will adjust NS coil data. (To obtain centre position, choose COARSE mode, move cursor to +ve or -ve x-axis and press left or right once).

N-S Coil Effect



- Once location is chosen, press 'OK' once, colour raster will appear, flashing cursor will disappear. Press Text colour keys (R,G,B,(Y=White)) to choose preferred raster colour. Use commander arrow keys left & right to change LCC or NS coil data in required mode. Once mis-landing has disappeared, press 'OK' once again. This will bring back SFC cross hatch pattern.
- If required, re-select another location for adjustment and repeat steps 5) to 8).
- Once all adjustment is complete, press 'Mute' key to Exit SFC Test mode.



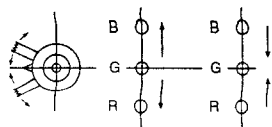
- Change Adjust Point
- Toggle Landing < Convergence
- Reverse the adjustment point
- Video 5 < Video 4
- Coarse < Fine
- Exit SFC Test Mode

3-3. Convergence

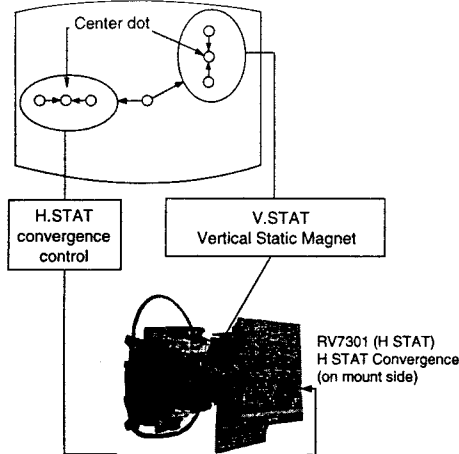
Screen centre convergence [Static convergence]

- Input a dot pattern signal from the pattern generator.
- Normalize the picture setting.
- [Moving vertically], adjust the V.STAT magnet so that the vertical red, green and blue dots coincide at the centre of the screen.

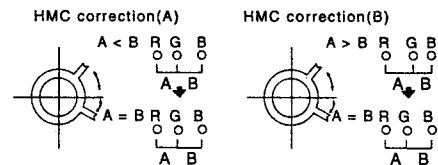
By opening or closing the V.STAT magnet, the red green and blue dots move in the direction indicated below.



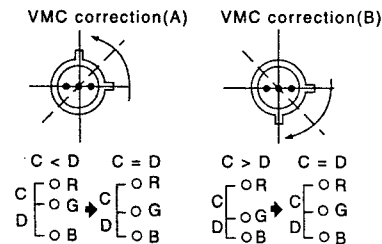
Note: Do not adjust the H-STAT by rotating the V-STAT magnets as this can affect the focus setting.



- Correction for HMC [Horizontal mis-convergence] and VMC [Vertical mis-convergence] by using the BMC [Hexapole] magnet.
- HMC correction by BMC [Hexapole] magnet and movement of the electron beam.



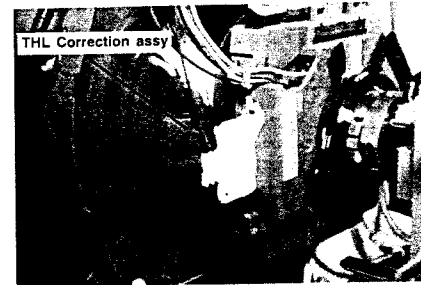
- VMC correction by BMC [Hexapole] magnet and movement of the electron beam.



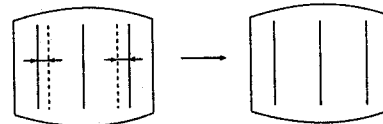
5. (KV-36HQ100)

When centre convergence adjustment is correct, use SFC Convergence Correction for other areas of the screen.
(See page 25).

TLH Adjustment (KV-32HQ100)



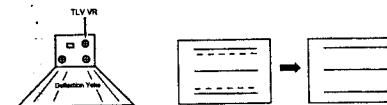
TLH correction can be performed by adding a TLH correction assembly to the Deflection yoke.



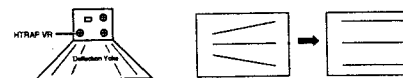
YCH Adjustment (KV-32HQ100)



TLV Adjustment (KV-32HQ100)



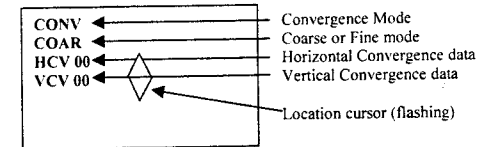
H-TRAP Adjustment (KV-32HQ100)



The H-TRAP should not be adjusted unless absolutely necessary as it affects the TLV settings.

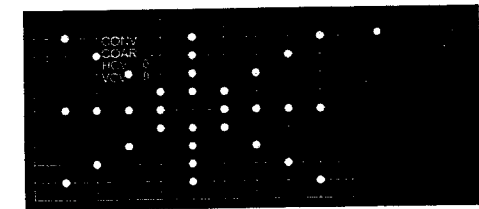
3-4. SFC Convergence Correction (KV-36HQ100)

- Use TT Commander to Obtain TT55
- SFC Menu & Crosshatch pattern will appear. Press button '2' to toggle to Convergence mode. Menu will appear as;



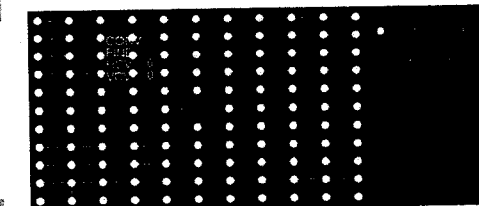
- To adjust Convergence, choose Coarse or Fine mode by toggling button '9'.

COARSE MODE ADJUSTABLE LOCATION



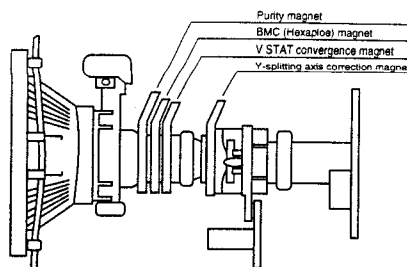
*In Coarse Mode, all data will change equally for that particular column area.

FINE MODE ADJUSTABLE LOCATION

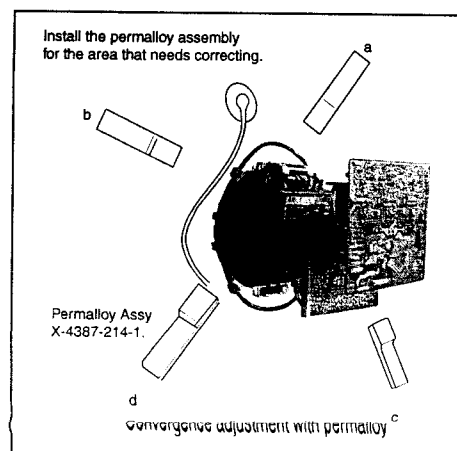
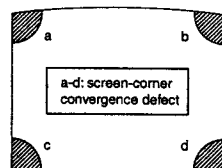


*In Fine Mode, data will change for that position only.

- Use commander arrows to move flashing location cursor to required position for adjustment.
- Choose required location by using arrow up, down, right, left on commander to move location cursor.
(Cursor will start in centre position)
- Once location is chosen, press 'OK' once, cross hatch pattern will remain and HCV and VCV will be adjustable.. location cursor will not flash.
- Toggle commander arrows left and right to adjust HCV, up and down arrows to adjust VCV. Text colour buttons can be pressed to check each colour if necessary. If mis-convergence has disappeared, press 'OK' once more, cursor will start to flash.
- If required, re-select another location for adjustment and repeat steps 5) to 7).
- Once all adjustment is complete, press 'Mute' key to Exit SFC Test mode.

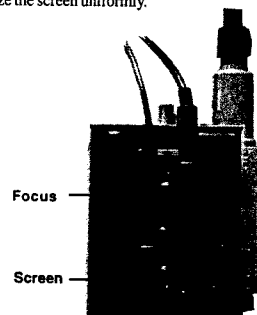


Note : On KV-32HQ100 if you are unable to adjust the corner convergence properly, this can be corrected with the use of permalloy magnets.



3-5. Focus Adjustment

1. Receive a cross hatch pattern from a video generator.
2. Adjust the focus control located on the flyback transformer to the best level at the centre of the screen.
3. Check left and right x-axis vertical line thickness and adjust to make them as thin as possible.
4. Considering x-axis and centre, adjust to make uniform.
5. If no cross hatch signal is possible, follow the next three steps.
6. Receive a television broadcast signal.
7. Normalize the picture setting.
8. Adjust the focus control located on the flyback transformer to obtain the best focus at the centre of the screen. Bring only the centre area of the screen into focus, the magenta appearing on the screen. In this case, adjust the focus to optimize the screen uniformly.



3-6. Screen (G2), White Balance

[Adjustment in the service mode using the remote commander]

G2 adjustment

1. Input a dot signal from the pattern generator.
2. Set the Picture, Brightness and Colour to minimum.
3. Apply 169V DC from an external power supply to the R, G and B cathodes of the CRT.
4. Whilst watching the picture, adjust the G2 control [SCREEN] located on the flyback transformer to the point just before the flyback return lines disappear.

White balance adjustment for TV mode

1. Input an all-white signal from the pattern generator.
2. Program the Remote Commander for operation in Service Mode. [See Page 27].
3. Enter into the 'Service Mode' by pressing 'VIDEO' button twice and 'MENU' on the Service Commander.
4. Select 'Device Register Setting' from the on screen menu display and press 'Right Arrow'.
5. Select 'Backend' from the on screen menu display and press 'Right Arrow'.
6. Set the 'Contrast' to MAX.
7. Set the 'R-Drive' to 45.
8. Adjust the 'G-Drive' and the 'B-Drive' so that the white balance becomes optimum.
9. Press the 'OK' button to write the data for each item.
10. Set the 'Contrast' to MIN.
11. Set the 'R-Cutoff' to 35.
12. Adjust the 'G-Cutoff', and the 'B-Cutoff' with the left and right buttons on the remote commander so that the white balance becomes optimum.
13. Press the 'OK' button to write the data for each item.

SECTION 4 CIRCUIT ADJUSTMENTS

4-1. Electrical Adjustments

Service adjustments to this model can be performed using the supplied remote Commander RM-940.

Programming the Remote Commander for Operation in Service Mode

1. Press and hold the left Mode Select button until the VCR and DVD LED's flash.
2. Press 99999. The TV LED should light. The remote commander is now set to Service Mode.
3. To return the remote commander to normal operation mode repeat step 1. then press 00000. The TV LED should light. The remote commander is now set to normal mode.

Setting the TV into Service Mode

1. Program the remote commander for operation in Service Mode as described above.
2. Turn on the TV main power switch.
3. Press the video standby button on the remote commander twice. 'TT' will appear in the upper right corner of the screen. Other status information will also be displayed.
4. Press 'MENU' on the remote commander twice to obtain the following menu on the screen.

AE7 Service Menu

Model Settings
Features
Device Settings
Monitor

Up: Down: Next: Page 1/1

Table 4-1

5. Move to the corresponding adjustment item using the up or down arrow buttons on the Remote Commander.
6. Press the right arrow button to enter into the required menu item.
7. Press the 'Menu' button on the Remote Commander to quit the Service Mode when all adjustments have been completed.

Note :

- After carrying out the service adjustments, to prevent the customer accessing the 'Service Menu' switch the TV set OFF and then ON.
- Certain menu items are only available in production mode.

Model Settings

'Model Settings' is a sub menu of the 'Service Menu'. This menu stores a list of models that are supported by the chassis. Press the cursor right key to move to the model selection then press the cursor up or down keys to scroll through the models available. Press the OK key to select the model highlighted by the cursor.

The model setting is stored in flash and is used by the software for model dependent features or parameters to be available. The cursor left key will return to 'Service Menu'.

Model Settings

Model 32HQ100

Up: Down: Back: Edit: Page 1/1

Table 4-2

Features

'Features' is a sub menu of the 'Service Menu'. This menu is used to set up the digital camera and memory stick for those models which have this accessory and functions. Press the cursor right key to move to the selection field then press the cursor up or down keys to scroll to Yes or No. Press the OK key to select the required option. The cursor left key will return to 'Service Menu'.

Features

Camera No
Memory Stick No

Up: Down: Back: Select: Page 1/1

Table 4-3

Device Settings

'Device Settings' is a sub menu of the 'Service Menu'. This menu displays a list of I2C devices that are used in the chassis. Pressing the cursor up & down keys will scroll through the options available.

The cursor left key will return to 'Service Menu'.

Device Settings

Backend

3D Comb

Analogue Chroma

Digital Chroma

Analogue Sound

Up: Down: Back: Next: Page 1/1

Table.4-4

The following are examples of the menus and submenus within the Device Settings Menu.

Backend

Backend

CXA2170_Backend

CXA2170_Backend_Setup

CXA2170_Deflection

CXA2170_Status

MB88141_Deflection_DAC

CXB9781_SFC

CXB9781_SFC_Setup

Up: Down: Back: Next: Page 1/1

Table.4-5

CXA2170_Backend

No.	Name	Def.	Min	Max	Val.
1	PIC_ON	1	0	1	1
2	R_ON	0	0	1	1
3	G_ON	0	0	1	1
4	B_ON	0	0	1	1
5	DCOL	0	0	3	0
6	WB_SW	0	0	1	0
7	PICTURE	45	0	63	40
8	VM_LMT	3	0	3	3
9	HUE	31	0	63	31
10	YOFFSET_SW	0	0	1	0

Up: Down: Back: Edit: Reset:RED Key Page 1/6

Table.4-6

CXA2170_Backend_Setup

No.	Name	Def.	Min	Max	Val.
1	SUB_COLOUR	0	-8	8	119

Up: Down: Back: Edit: Reset:RED Key Page 1/1

Table.4-7

CXA2170_Deflection

No.	Name	Def.	Min	Max	Val.
1	UP_BLK	0	0	15	0
2	LO_BLK	0	0	15	0
3	V_SIZE	45	0	63	40
4	V_ON	1	0	1	1
5	SW_DC	0	0	1	0
6	V_POS	34	0	63	22
7	PST_SW	0	0	1	0
8	V_LIN	7	0	15	7
9	S_CORR	0	0	15	0
10	H_SIZE	30	0	63	25

Up: Down: Back: Edit: Reset:RED Key Page 1/8

Table.4-8

CXA2170_Status

No.	Name	Def.	Min	Max	Val.
1	HLOCK	0	0	1	1
2	IKR	0	0	1	1
3	HNG	0	0	1	0
4	VNG	0	0	1	0

Up: Down: Back: Edit: Reset:RED Key Page 1/1

Table.4-9

MB88141_Deflection_DAC

No.	Name	Def.	Min	Max	Val.
1	SFC_YSYM	0	0	255	128
2	UNUSED	0	0	255	83
3	DF_PHASE	175	0	255	172
4	H_LINEARTY	127	0	255	0
5	UNUSED	0	0	255	220
6	UNUSED	0	0	255	129
7	OP_PHASE	105	0	255	157
8	UNUSED	0	0	255	170
9	MID_LINEARTY	130	0	255	157
10	H_CENTRE	140	0	255	255

Up: Down: Back: Edit: Reset:RED Key Page 1/2

Table.4-10

CXD9761_SFC

No.	Name	Def.	Min	Max	Val.
1	L_TEU	0	-128	127	10
2	L_TFM	17	-128	127	-1
3	L_TED	0	-128	127	-1
4	R_TEU	0	-128	127	10
5	R_TFM	78	-128	127	-1
6	R_TED	0	-128	127	-1
7	RSTE	0	-128	127	-1
8	L_ENU	0	-128	127	-1
9	L_ENM	3	-128	127	-1
10	L_END	0	-128	127	-1

Up: Down: Back: Edit: Reset:RED Key Page 1/5

Table.4-11

CXD9761_SFC_Setup

No.	Name	Def.	Min	Max	Val.
1	PGM_ARRAY	3	0	7	7
2	HCMX	32	0	127	127
3	VCMX	32	0	127	127
4	LCMX	64	0	127	127
5	LAMX	64	0	127	127
6	NSMX	64	0	127	127
7	TESW	1	0	1	1
8	ENSW	1	0	1	1
9	NSSW	1	0	1	1
10	EWSSW	1	0	1	0

Up: Down: Back: Edit: Reset:RED Key Page 1/3

Table.4-12

3D Comb

No.	Name	Def.	Min	Max	Val.
1	CXD3804R_Control				
2	CXD3804R_Status				

Up: Down: Back: Next: Page 1/1

Table.4-13

CXD3804R_Control

No.	Name	Def.	Min	Max	Val.
1	PLL	0	0	3	0
2	CKSEL	1	0	1	1
3	ADCKSEL	0	0	1	0
4	INSW	0	0	1	0
5	THRU	3	0	3	3
6	PDWN	0	0	1	0
7	VSIZE	1	0	1	1
8	HSIZE	1	0	7	1
9	PNSW	1	0	1	1
10	PEDCLIP	0	0	1	0

Up: Down: Back: Edit: Reset:RED Key Page 1/9

Table.4-14

CXD3804R_Status

No.	Name	Def.	Min	Max	Val.
1	Undefined	0	0	255	0

Up: Down: Back: Edit: Reset:RED Key Page 1/1

Table.4-15

Analogue Chroma



Table.4-16

CXA2163Q_Control

No.	Name	Def.	Min	Max	Val.
1	PN_ID	0	0	1	0
2	PN_GW	0	0	1	0
3	HUE	0	0	1	0
4	SUB_CONTRAST	0	0	1	0
5	SUB_COLOR	3	0	3	3
6	SHARPNESS_GAIN	10	0	15	10
7	SHARPNESS_EQ	2	0	3	2
8	SHARPNESS_FD	2	0	3	2
9	BS_POINT	0	0	3	0
10	Y_OUT_LEVEL	11	0	63	11

Table.4-17

CXA2163Q_Status

No.	Name	Def.	Min	Max	Val.
1	POA	0	0	1	0
2	COLOR_SYSTEM	0	0	3	1
3	X_TAL	0	0	3	0
4	N_DET	0	0	3	0
5	H_LOCK	0	0	1	1
6	V_FREQ	0	0	1	0
7	V STD	0	0	1	1
8	C_IN	0	0	1	0
9	V_SIG	0	0	1	0
10	V15	0	0	1	0

Table.4-18

Digital Chroma

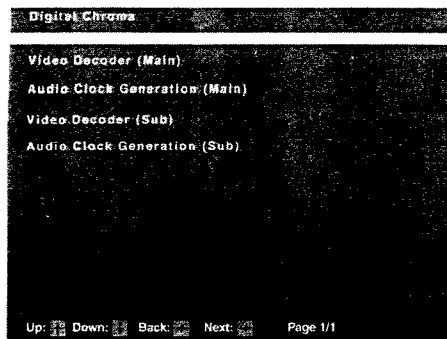


Table.4-19

Video Decoder (Main)

No.	Name	Def.	Min	Max	Val.
1	FUSE	2	0	3	2
2	MODE	49	0	63	10
3	GAFIX	1	0	1	1
4	GA128	0	0	1	0
5	GA118	0	0	1	0
6	GA117-GA110	32	0	255	64
7	GA127-GA120	192	0	255	223
8	BYPASS	0	0	1	1
9	YCOMB	1	0	1	0
10	LUF1	0	0	15	9

Table.4-20

Audio Clock Generation (Main)

No.	Name	Def.	Min	Max	Val.
1	ACPF	0	0	262143	0

Table.4-21

Analogue Sound

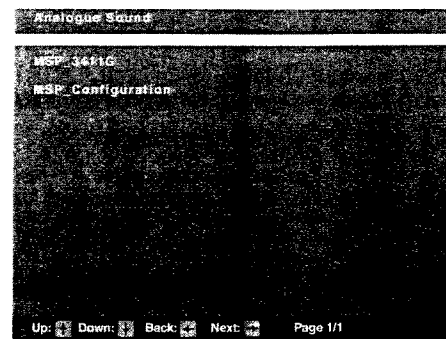


Table.4-22

MSP_3411G

No.	Name	Def.	Min	Max	Val.
1	Vol_Loud	0	0	127	48
2	L_Bal	0	-127	127	0
3	L_Bass	0	-96	127	0
4	L_Treble	0	-96	120	0
5	L_Loud	0	0	68	23
6	Spatial	0	-128	127	0
7	Spatial_Mode	0	0	46	0
8	Vol_Head	0	0	127	0
9	PRE_FM	27	0	127	27
10	PRE_125	16	0	127	16

Table.4-23

MSP_Configuration

No.	Name	Def.	Min	Max	Val.
1	AMBASE_ON	1	0	1	1
2	NICAM_ON	1	0	1	1
3	PRE_NICAM_BG	53	0	127	53
4	PRE_NICAM_L	59	0	127	59
5	PRE_NICAM_OK	53	0	127	53
6	PRE_NICAM_I	97	0	127	97

Table.4-24

Monitor

'Monitor' is a sub menu of 'Service Menu'.
Pressing the cursor up & down keys will scroll through the options available.
The cursor left key will return to 'Service Menu'.

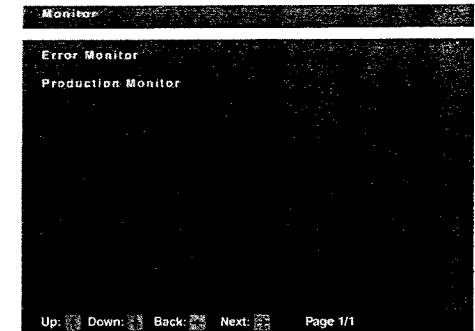


Table.4-25

Error Monitor

Error Monitor	
Error Detection	On
Error 1	No Error
Error 2	No Error
Error 3	No Error
Error 4	No Error
Error 5	No Error
Operating Time	
Hours	000013
Mins	30

Table.4-26

Production Monitor

Production Monitor	
Model/Chassis	36HQ100/AE-7A
M2 SW Version	RELEASE_M2_V065
MIPS SW Version	1.26/0
TN SW Version	1.26/0
BTM SW Version	1.00/0
Destination	BL
Service Mode	Service
Auto Standby	Enabled
FM Overmodulate	Disabled
100Hz Mode Menu	Disabled

Table.4-27

Deflection System Adjustment

- Enter into the service mode and select 'Device Settings' => 'Backend' => 'CX2170_Deflection' from the menu. The 'Deflection' adjustment menu will be displayed.
- Select and adjust each item to obtain the optimum image.

No	Name	Def.	Min	Max	Val.
1	UP_BLK	0	0	15	0
2	LO_BLK	0	0	15	0
3	V_SIZE	45	0	63	40
4	V_ON	1	0	1	1
5	SW_DC	0	0	1	0
6	V_POS	34	0	63	22
7	RST_SW	0	0	1	0
8	V_LIN	7	0	15	7
9	S CORR	0	0	15	0
10	H_SIZE	39	0	63	25

Up: [Up] Down: [Down] Back: [Back] Edit: [Edit] Reset: RED Key Page 1/8

Table 4-28

No	Name	Def.	Min	Max	Val.
11	UP_UCP	0	0	3	0
12	PIN_AMP	16	0	63	16
13	LO_UCP	0	0	3	0
14	UP_CPIN	35	0	63	35
15	UP_UCG	0	0	3	0
16	LO_CPIN	35	0	63	35
17	LO_UCG	0	0	3	0
18	PIN_PHASE	29	0	63	26
19	UC_POL	0	0	1	0
20	PC_POL	0	0	1	0

Up: [Up] Down: [Down] Back: [Back] Edit: [Edit] Reset: RED Key Page 2/8

Table 4-29

No	Name	Def.	Min	Max	Val.
21	H_POS	31	0	63	0
22	MSISK	0	0	1	0
23	CLP_SHIFT	0	0	1	0
24	AFC_BOW	33	0	63	35
25	AFC_MODE	2	0	3	2
26	AFC_ANGLE	30	0	63	30
27	SYNC_PHASE	0	0	1	0
28	LEFT_BLK	33	0	63	32
29	CLP_PHASE	0	0	3	0
30	RIGHT_BLK	27	0	63	22

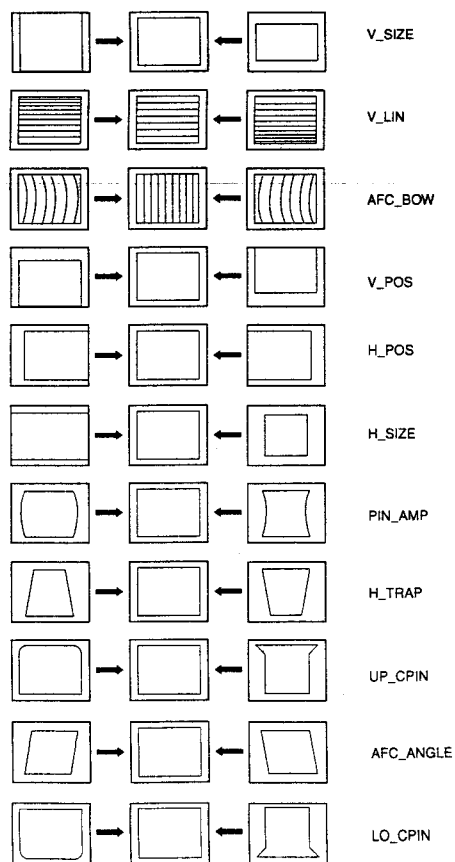
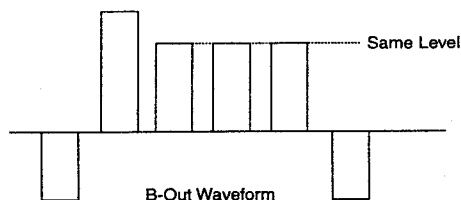
Up: [Up] Down: [Down] Back: [Back] Edit: [Edit] Reset: RED Key Page 3/8

Table 4-30

4-2. Volume Electrical Adjustments

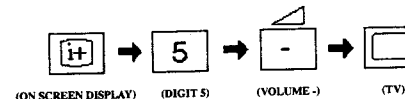
Sub Colour Adjustment

- Input a PAL colour bar signal.
- Connect an oscilloscope to CN7301 pin 5 located on the C2 Board.
- Set the TV into 'Service Mode' (See page 27).
- Choose 'Device Settings' > 'Backend' > 'CX2170_Backend_Setup' from the menu.
- Adjust 'SUB_COLOUR' data so that the right sides of the waveform are of equal height.



4-3. TEST MODE 2:

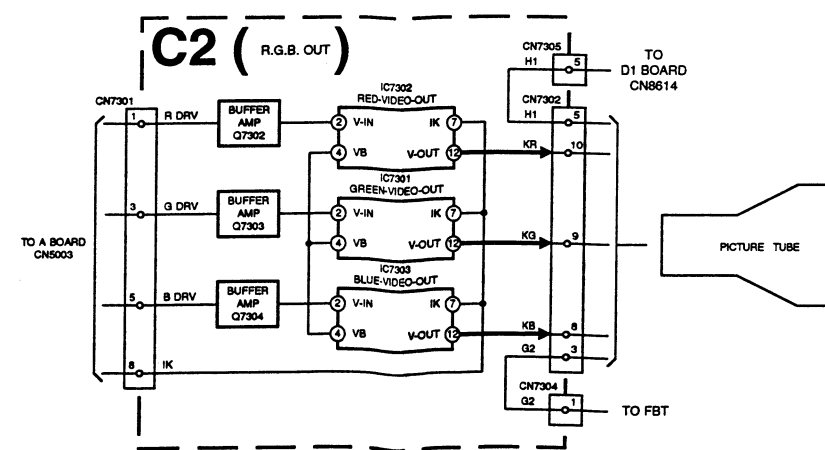
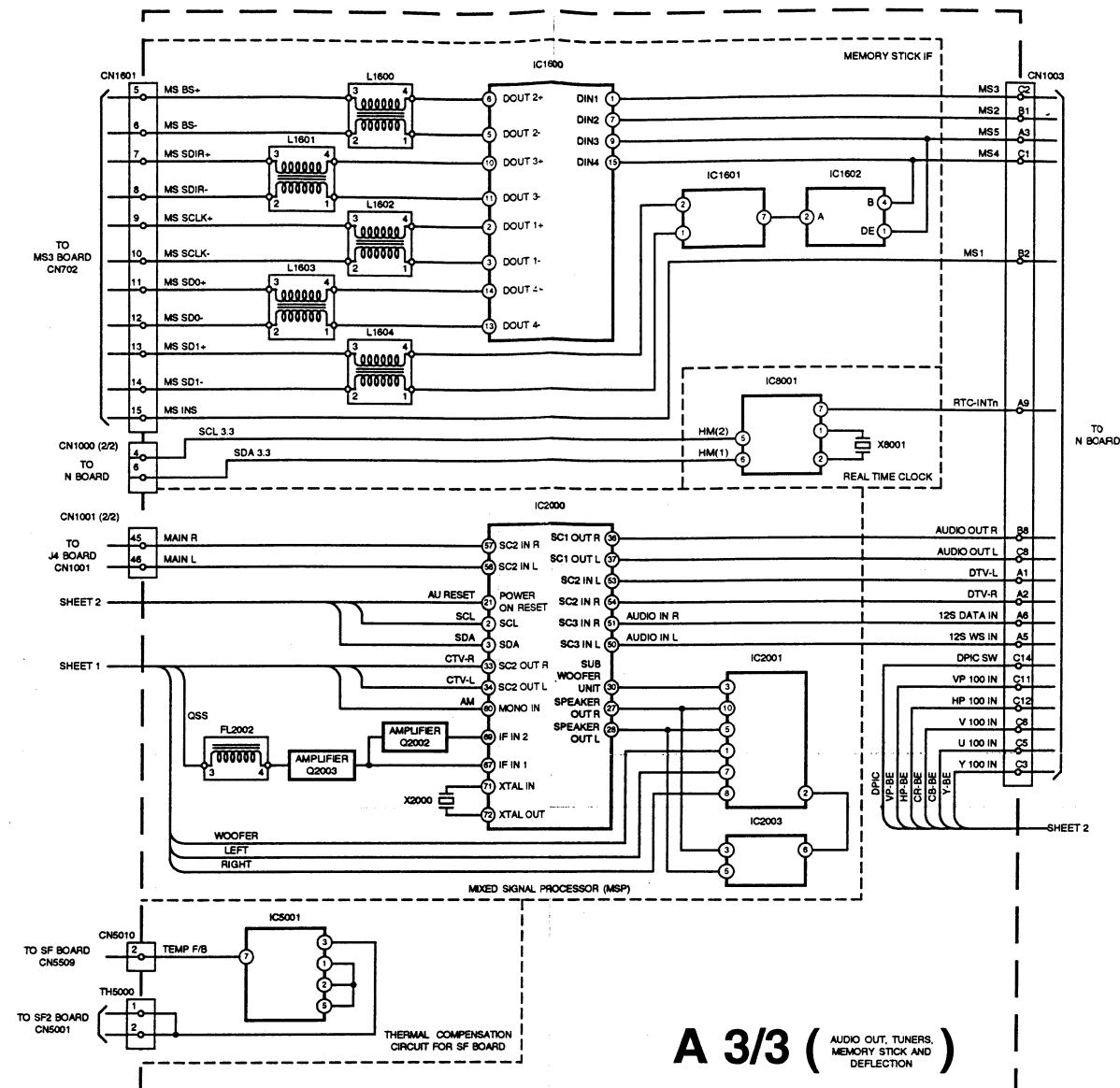
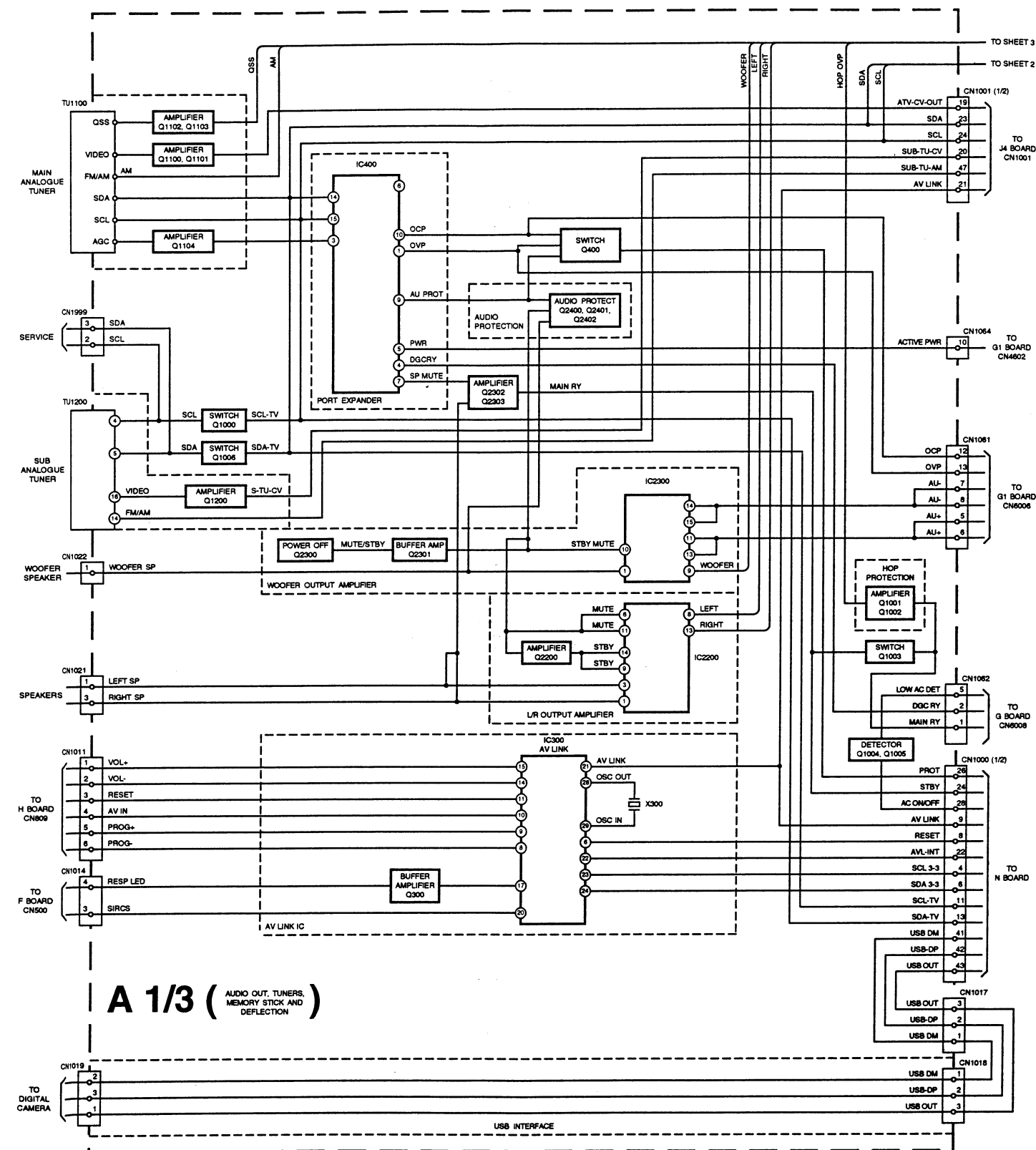
Is available by pressing the 'VIDEO' button twice, when the remote commander is set to 'Service Mode' (See Page 27), OSD 'TT' appears. The functions described below are available by selecting the two numbers. To release the 'Test mode 2', press 0 twice, press the TV button or switch the TV set into Stand-by mode. Pressing the two Local Control buttons (PROG + and -) during power ON will also switch into 'TT' mode. Also with the TV in standby mode use the following key sequence.



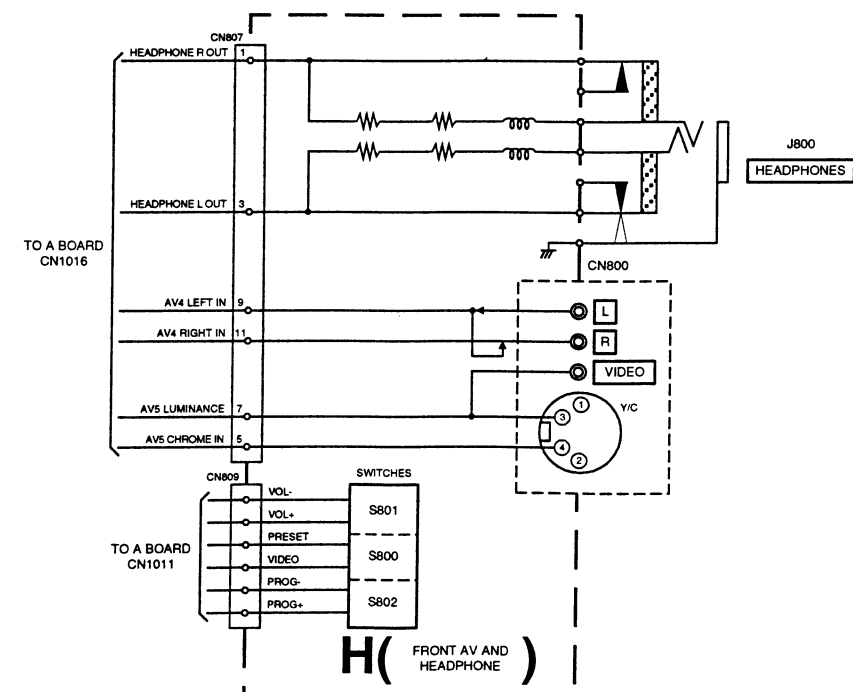
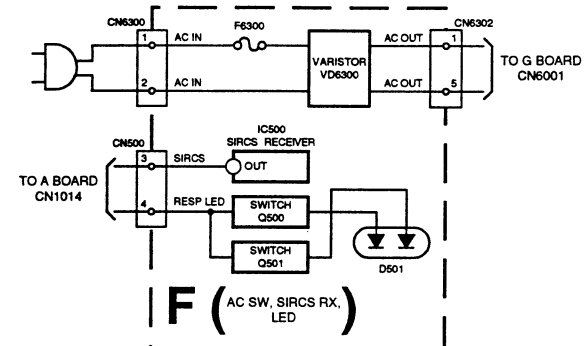
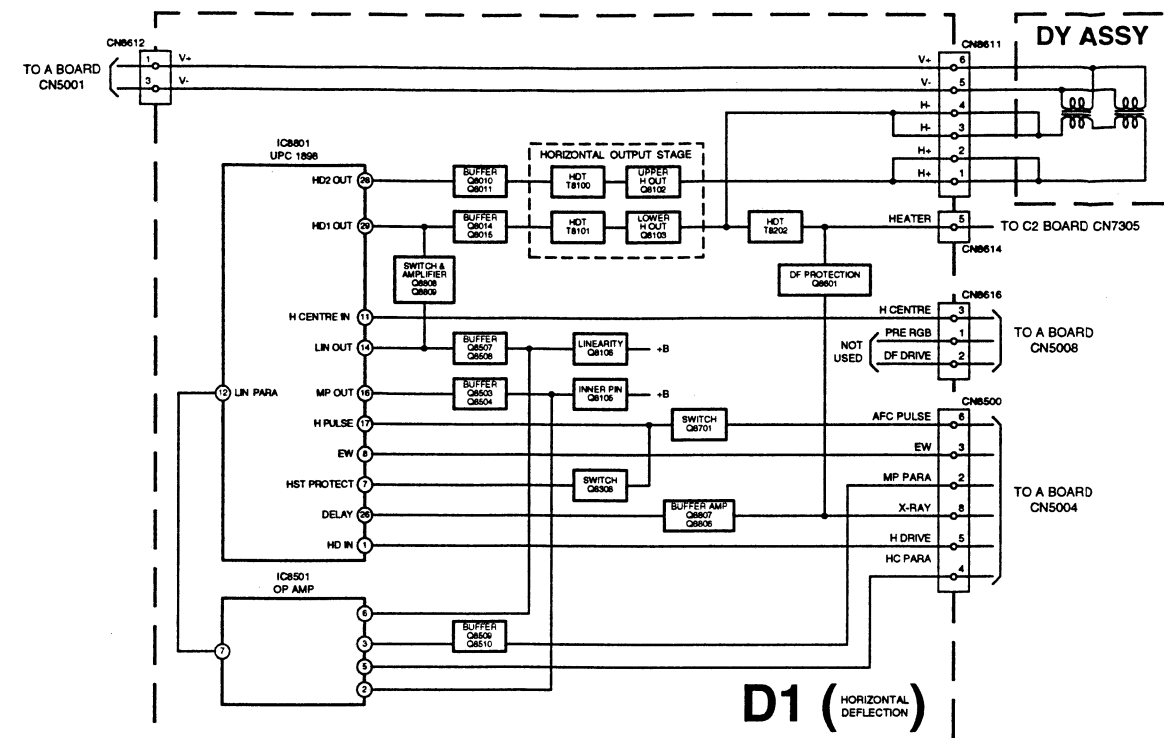
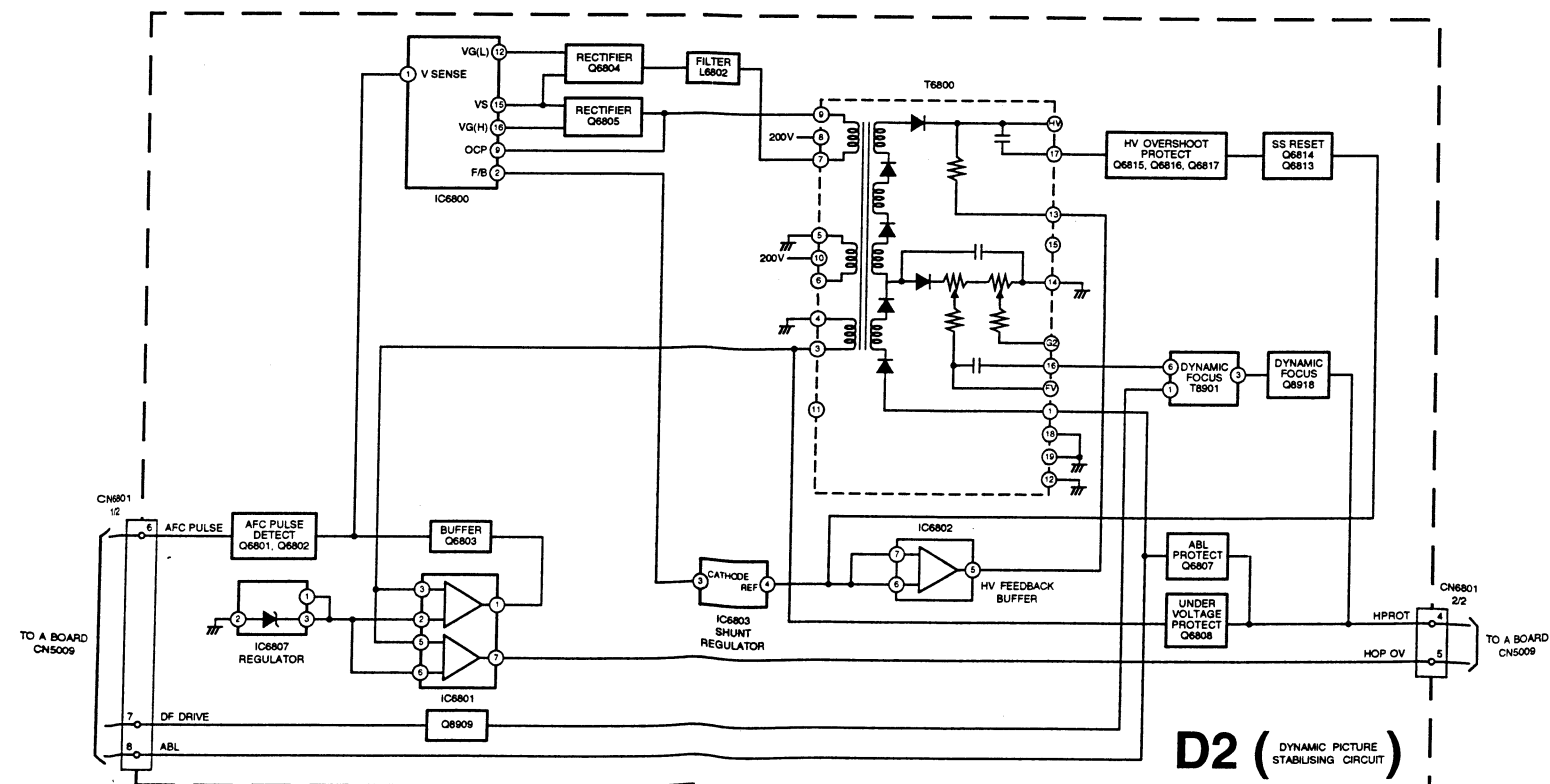
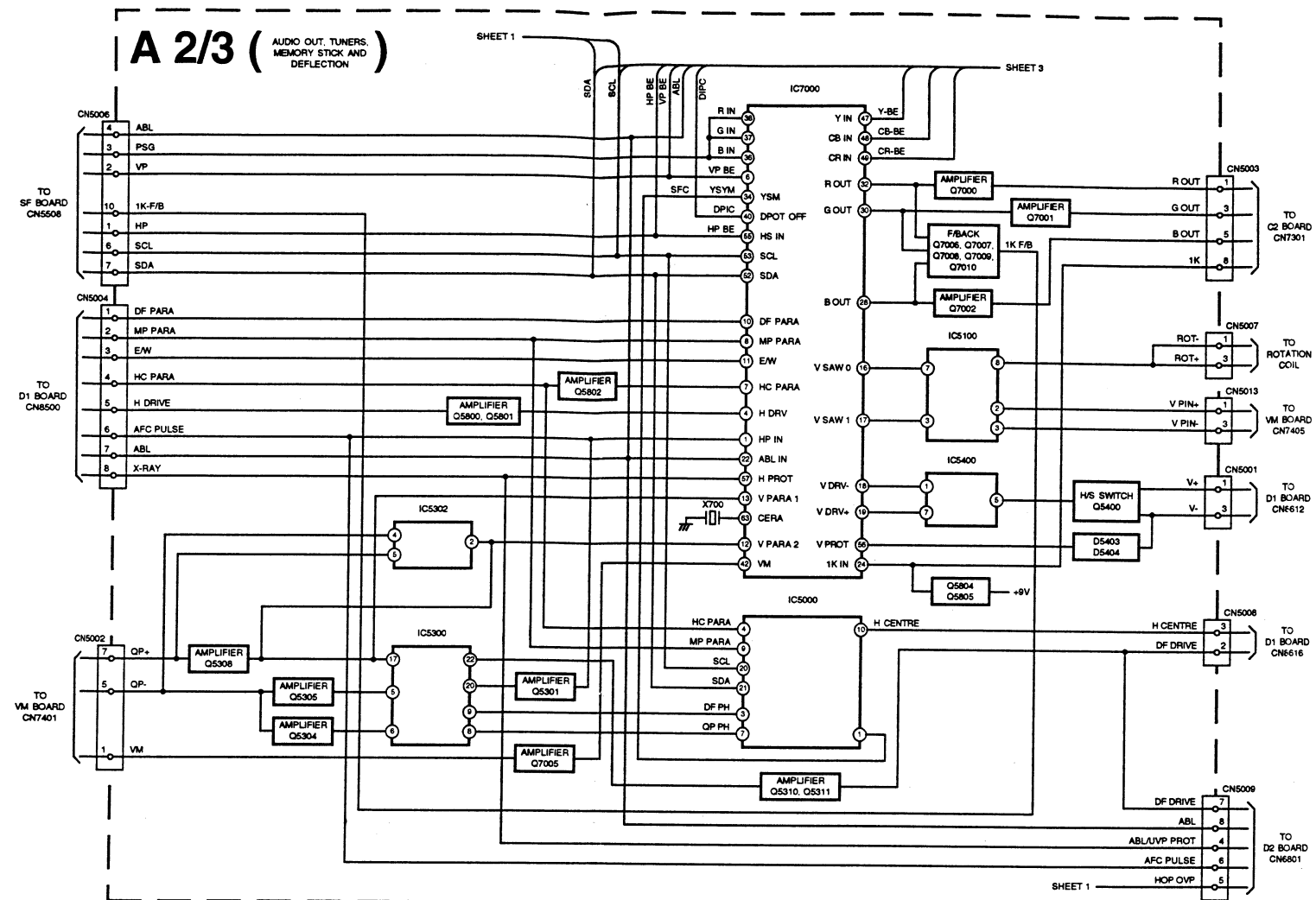
Menu	Enter Service Menu
00	Exit from TT mode
01	Set picture level to maximum
02	Set picture level to minimum
03	Set speaker/headphone Volume to 35%
04	Set speaker/headphone Volume to 50%
05	Set speaker/headphone Volume to 65%
06	Set speaker/headphone Volume to 80%
07	Ageing mode on
08	Shipping Condition
11	Sub picture adjustment
12	Sub colour adjustment
13	Sub brightness adjustment
15	Rotation coil test
16	Picture level 50%
17	Production monitor
18	Design mode enable/disable
19	Production mode enable/disable
21	Destination ADE
22	Destination B, Multi
24	Destination U
27	Destination K
28	Destination R
29	H Centre Adjustment
31	Auto standby enable/disable
34	Screen Mode Automatic Test
36	VM off/on test
37	VM on
38	VM off
43	Select Dual A sound
44	Select Dual B sound
45	Select Mono sound

46	Select Stereo sound
47	Set Flash as non-virgin
48	Set Flash as virgin
51	Virtual Dolby on/off
52	Subwoofer check
54	FM Overmodulation enable/disable
55	Enter SFC adjustment mode
56	Focus Phase adjust
57	Focus DC level adjust
58	Memory Stick Capture Test
59	Camera Test
62	AM from baseband enable/disable
65	Reset Errors
66	Error Checking enable/disable
71	Force PAL
72	Unforced PAL
75	Pin Amp/UC Pin Deflection offset adjust
76	LC Pin/Trap Deflection offset adjust
77	Reset Deflection offsets
78	Balance full left
79	Balance full right
81	Digital BER Display On/Off
87	Local keys test
88	Clear digital tuning database
91	Set 14:9 mode
92	Set Smart mode
93	Set 16:9 mode
94	Set ZOOM mode
95	Set 4:3 mode
96	TS path switch (tuner/CI slot)
99	Display Error and Working Time menu

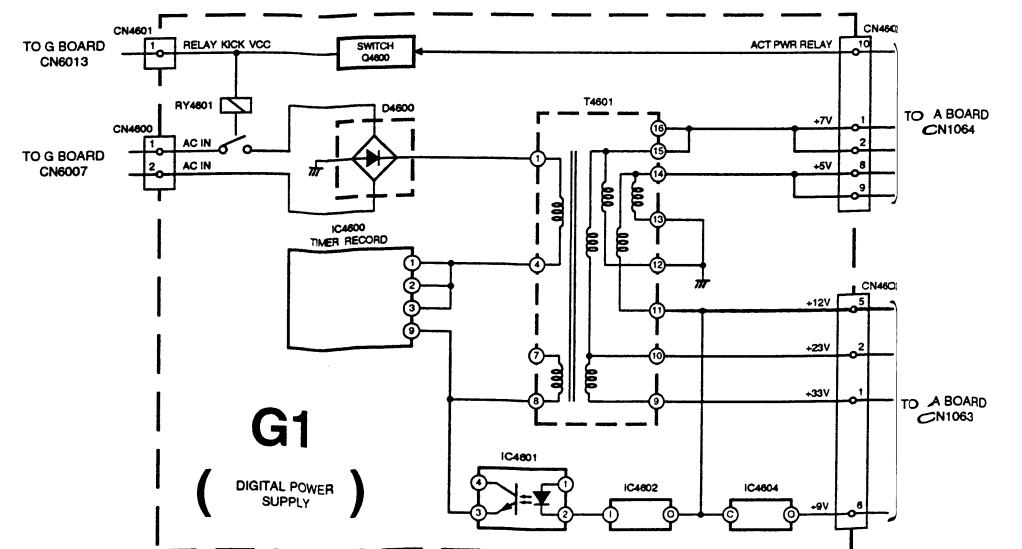
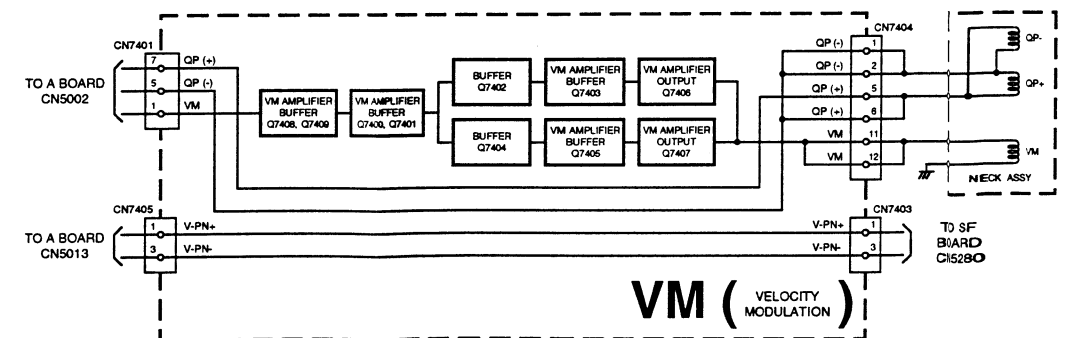
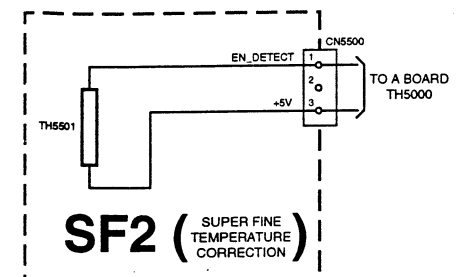
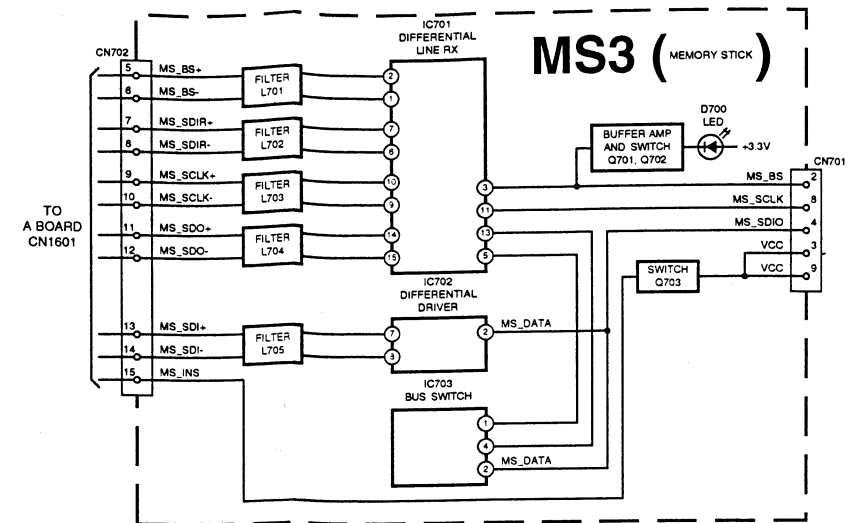
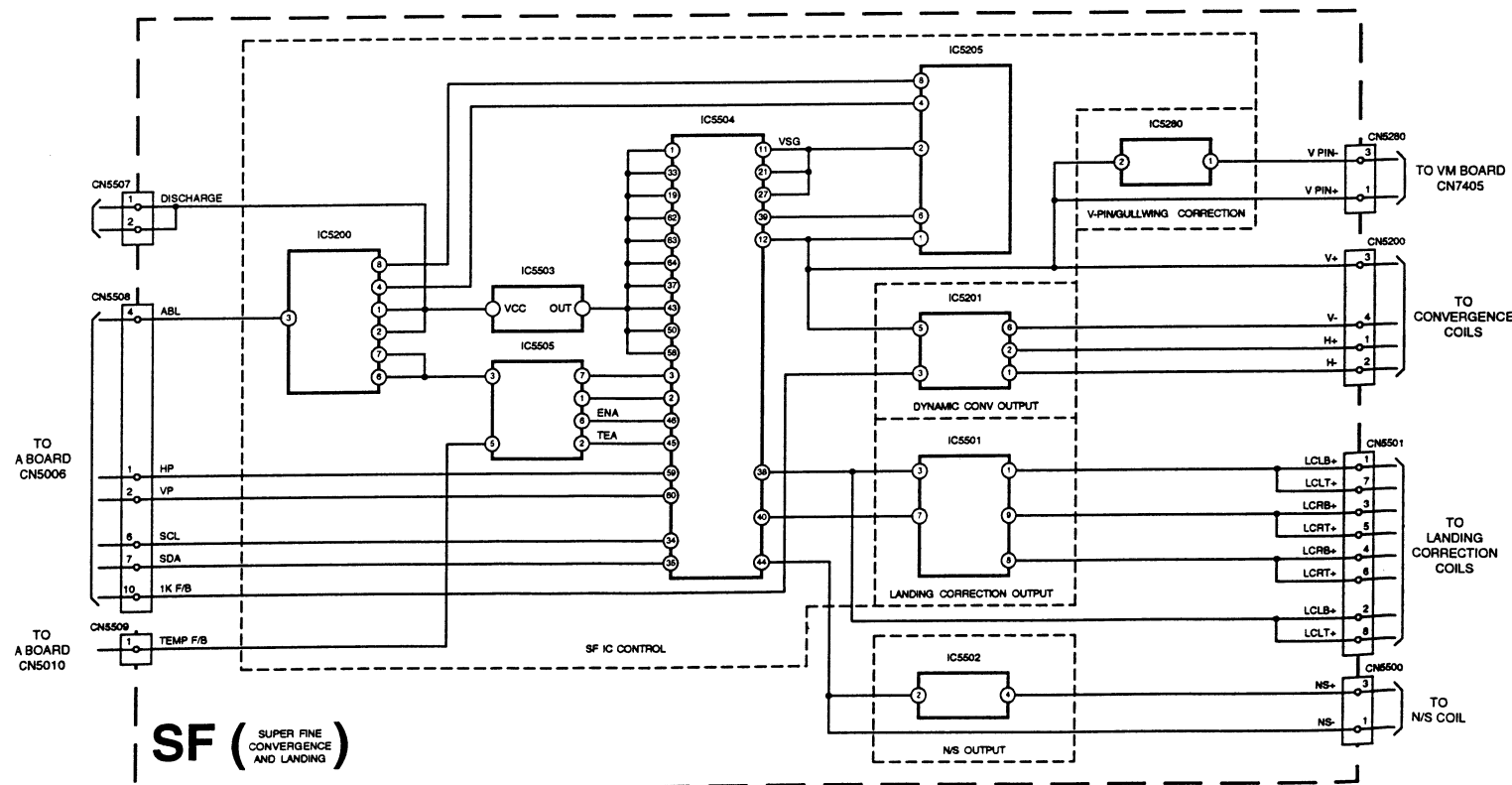
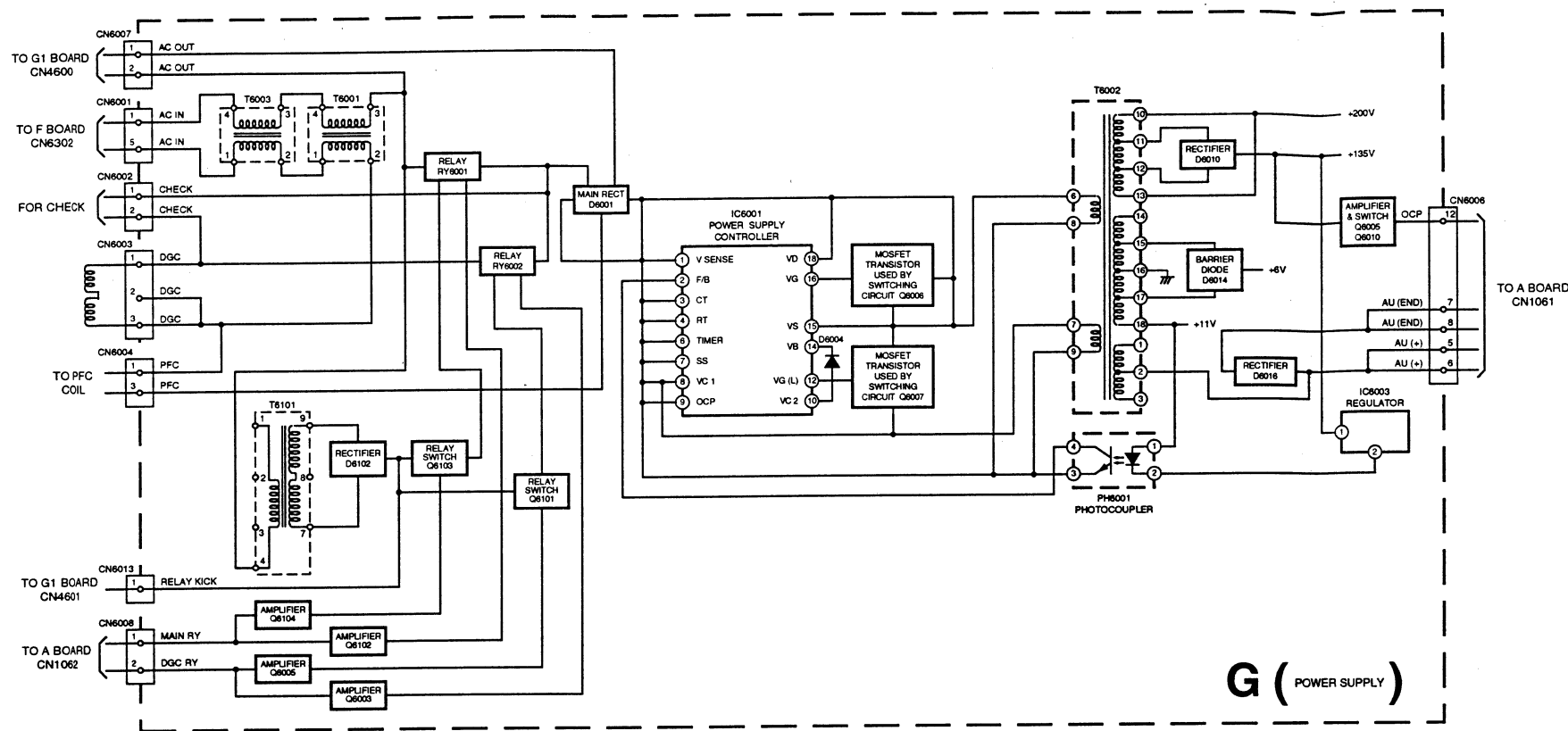
5-1. BLOCK DIAGRAMS (1)



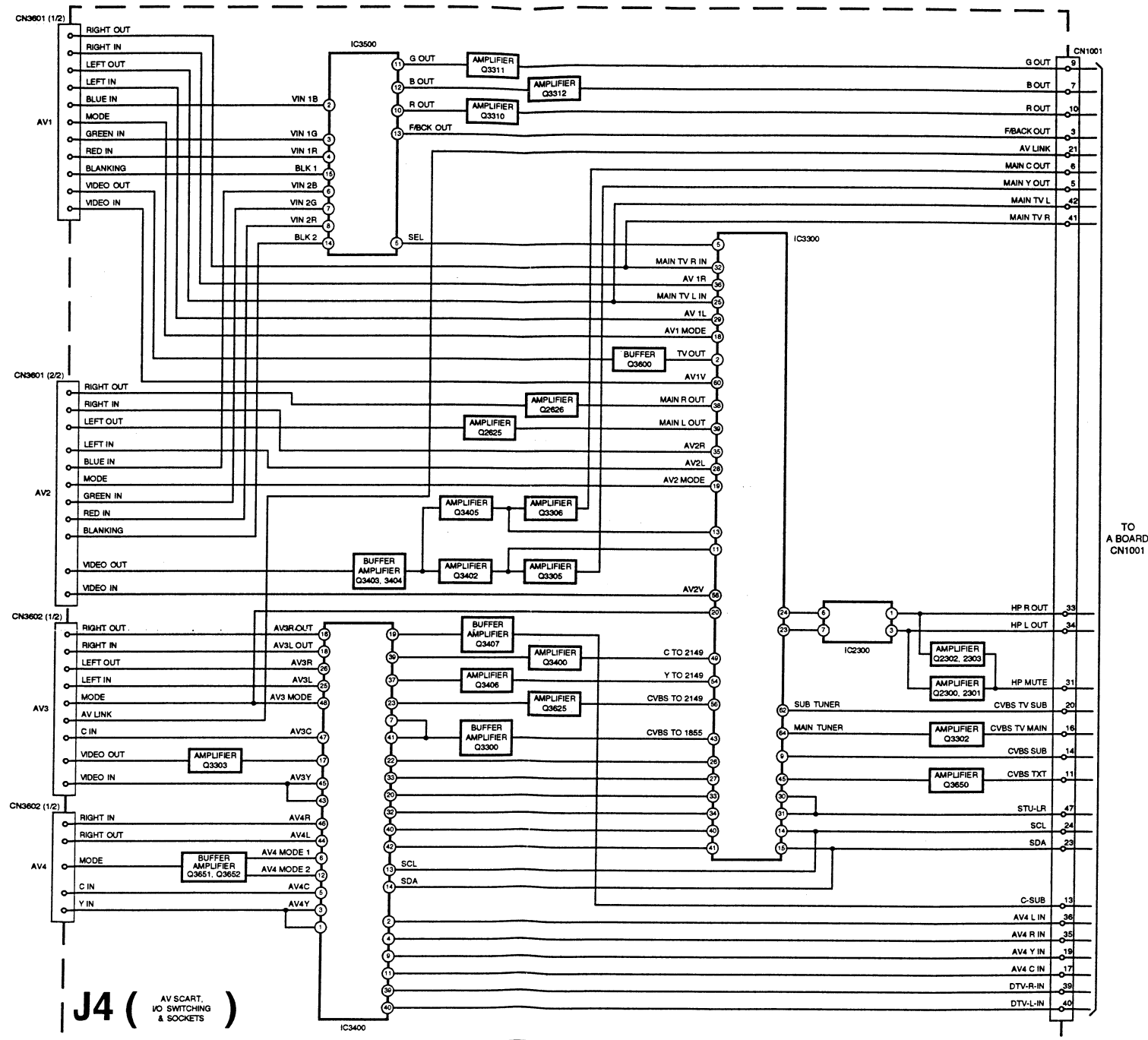
5-1. BLOCK DIAGRAMS (2)



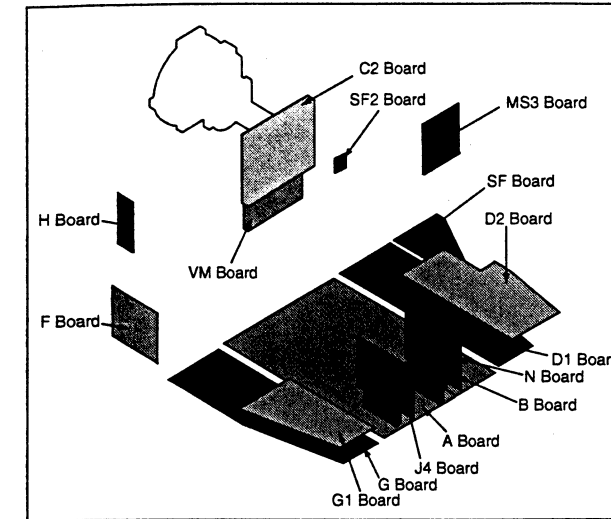
5-1. BLOCK DIAGRAMS (3)



5-1. BLOCK DIAGRAMS (4)



5-2. CIRCUIT BOARD LOCATION







5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note :






- All capacitors are in μF unless otherwise noted.
- $\text{pF} : \mu\text{F}$ 50WV or less are not indicated except for electrolytic types.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch : 5mm
Electrical power rating : 1/4W


- Chip resistors are 1/10W
- All resistors are in ohms.
k = 1000 ohms, M = 1000,000 ohms

-  : nonflammable resistor.
-  : fusible resistor.
-  : internal component.
-  : panel designation or adjustment for repair.


- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in Volts.
- Readings are taken with a 10Mohm digital multimeter.
- Readings are taken with a color bar input signal.
- Voltage variations may be noted due to normal production tolerances.

-  : B + bus.
-  : B - bus.
-  : RF signal path.
-  : earth - ground.
-  : earth - chassis.

Reference Information

RESISTOR	RN	: METAL FILM
	RC	: SOLID
	FPRD	: NON FLAMMABLE CARBON
	FUSE	: NON FLAMMABLE FUSIBLE
	RS	: NON FLAMMABLE METAL OXIDE
	RB	: NON FLAMMABLE CEMENT
	RW	: NON FLAMMABLE WIREWOUND
		: ADJUSTMENT RESISTOR
COIL	LF-8L	: MICRO INDUCTOR
CAPACITOR	TA	: TANTALUM
	PS	: STYROL
	PP	: POLYPROPYLENE
	PT	: MYLAR
	MPS	: METALIZED POLYESTER
	MPP	: METALIZED POLYPROPYLENE
	ALB	: BIPOLAR
	ALT	: HIGH TEMPERATURE
	ALR	: HIGH RIPPLE

Note : The components identified by shading and marked **Δ** are critical for safety. Replace only with the part numbers specified in the parts list.

Note : Les composants identifiés par une trame et par une marque  sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces de numéro spécifié. specified.

~ A Board Location Table (A Side) ~

DIODE	D4100	B - 1	D6201	J - 2	D7015	K - 6	IC2000	F - 6	IC5302	M - 9	IC6216	K - 2	Q2406	A - 3	Q5800	I - 10	
D400	K - 1	D5303	L - 9	D6202	N - 2	D8001	C - 3	IC2003	F - 4	IC5400	D - 10	IC6225	L - 4	Q2408	B - 3	Q5804	L - 8
D1607	H - 4	D5304	L - 9	D6203	M - 3	IC		IC2200	G - 3	IC6203	M - 3	IC6229	K - 5	Q5304	K - 9	Q5805	L - 8
D2000	G - 6	D5305	L - 9	D6206	J - 5	IC300	M - 5	IC2300	I - 3	IC6205	M - 2	IC7000	J - 6	Q5305	K - 9	Q7000	K - 7
D2002	H - 4	D5400	E - 10	D6215	N - 2	IC400	J - 2	IC5000	K - 8	IC6211	J - 5	IC8001	D - 3	Q5308	M - 10	Q7001	K - 7
D2004	H - 5	D5401	D - 10	D7000	L - 6	IC1600	I - 5	IC5001	N - 6	IC6212	J - 4	TRANSISTOR		Q5310	I - 10	Q7002	K - 7
D2400	B - 3	D5402	E - 10	D7002	L - 7	IC1601	H - 6	IC5100	L - 8	IC6213	J - 3	Q300	L - 5	Q5311	I - 10	Q7003	L - 7
D2403	B - 3	D6200	J - 3	D7010	L - 6	IC1602	H - 6	IC5300	J - 10	IC6215	M - 4	Q400	K - 2	Q5400	F - 10	Q7004	L - 7

~ A Board Semiconductor Voltages ~

Ref	(e)	(b)	(c)	Ref	(e)	(b)	(c)
Q1100	1.3	2.0	4.3	Q2004	4.9	5.5	8.8
Q1101	4.9	4.3	2.1	Q5801	3.5	2.8	0
Q1104	0	0.4	4.2	Q5804	3.5	4.2	0
Q2002	1.2	1.8	4.9	Q5801	3.5	2.2	8.9
Q2003	1.8	2.4	4.9	Q7002	3.6	3.0	0

~ A Board Location Table (B Side) ~

DIODE		D2003	H - 5	D2400	M - 3	D5401	K - 10	D6203	A - 3	IC5302	B - 9	IC6216	C - 2	Q1006	G - 8	Q2003	I - 5	Q5304	C - 9
D303	B - 5	D2004	G - 5	D2403	M - 3	D5402	I - 10	D6204	B - 2	IC5400	K - 10	IC6225	C - 3	Q1100	H - 3	Q2301	F - 2	Q5305	D - 9
D1001	M - 9	D2200	G - 2	D4100	M - 2	D5403	H - 10	D6206	E - 5	IC5600	G - 10	IC6229	C - 5	Q1101	H - 3	Q2302	G - 2	Q5309	B - 9
D1002	M - 10	D2201	F - 2	D5303	C - 9	D5404	H - 9	IC		IC6203	B - 2	TRANSISTOR		Q1102	I - 3	Q2303	G - 2	Q5400	I - 10
D1003	M - 10	D2300	G - 2	D5304	C - 9	D5800	C - 8	IC2001	H - 4	IC6205	B - 2	Q1000	G - 8	Q1103	J - 3	Q2400	E - 4	Q5801	E - 8
D1004	M - 10	D2301	G - 2	D5305	C - 9	D5801	B - 8	IC2200	G - 3	IC6211	D - 5	Q1001	B - 1	Q1104	L - 3	Q2401	E - 5	Q7005	E - 7
D1008	C - 2	D2302	G - 2	D5307	A - 10	D6200	E - 3	IC2300	F - 3	IC6212	E - 4	Q1002	B - 1	Q1200	H - 2	Q2402	F - 5		
D1100	L - 3	D2303	F - 3	D5308	A - 10	D6201	E - 2	IC5100	B - 7	IC6213	E - 2	Q1004	C - 2	Q1301	M - 3	Q2407	M - 3		
D2001	H - 6	D2304	F - 2	D5400	J - 10	D6202	A - 2	IC5300	E - 10	IC6215	B - 3	Q1005	B - 1	Q2002	I - 5	Q5301	E - 9		

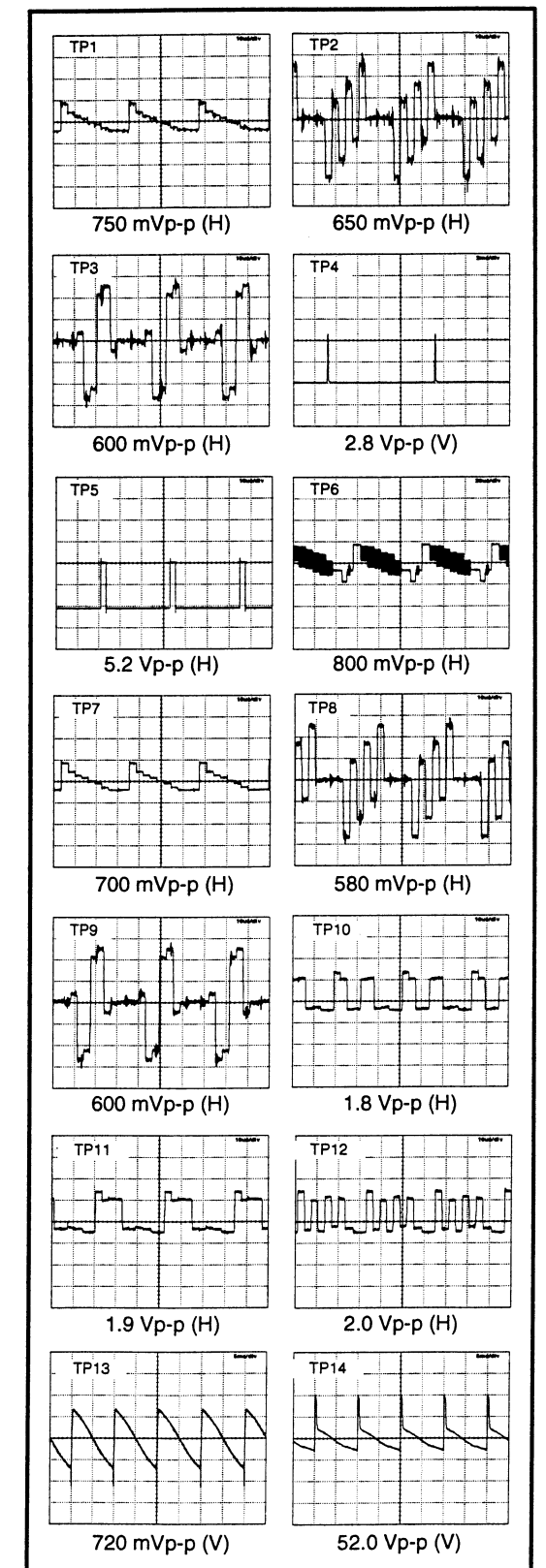
~ A Board IC Voltages ~

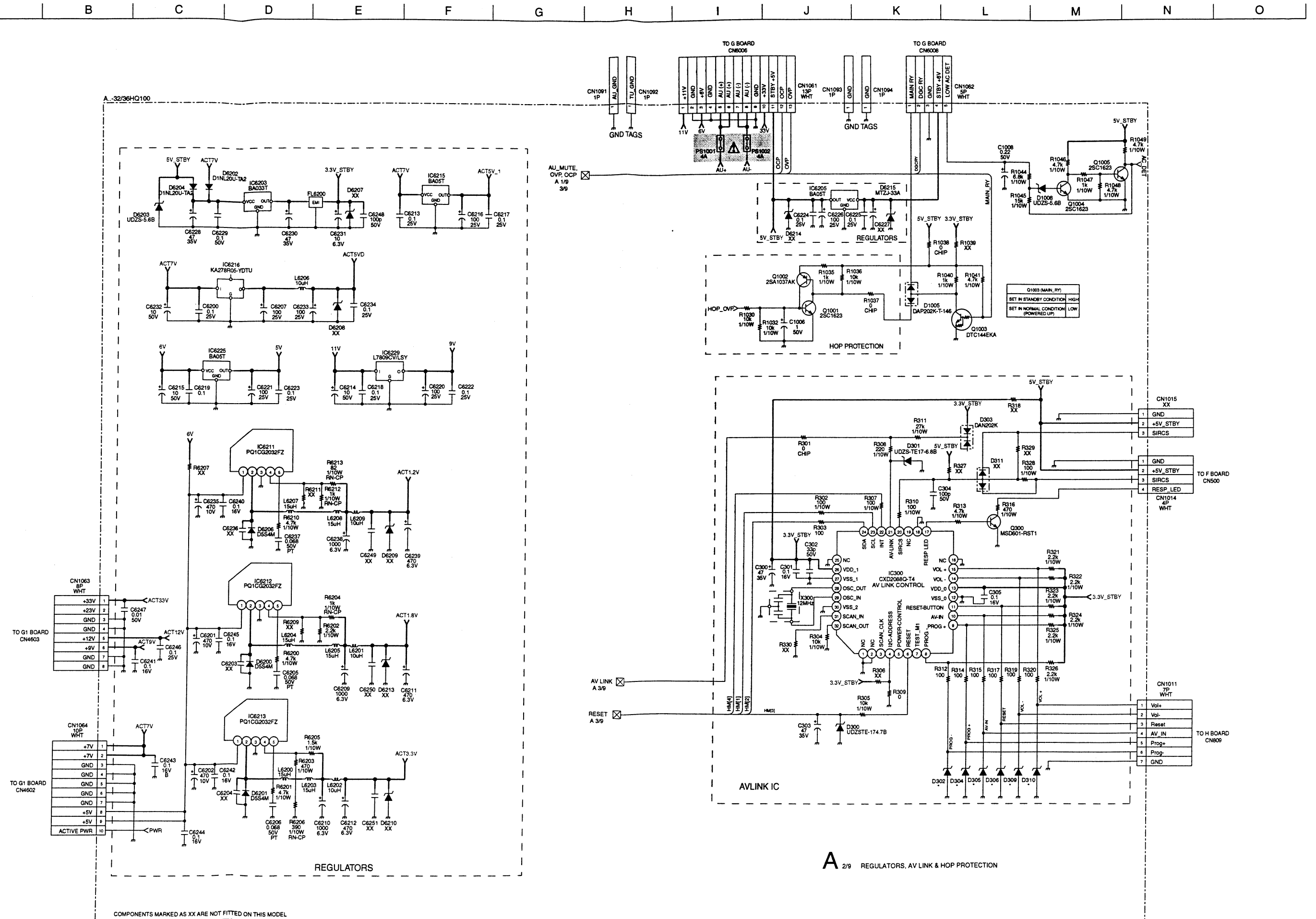
Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)				Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)
IC2200	1	0	IC2200	11	0.3	IC2300	6	-13.3	IC5000	1	1.9	IC5000	11	2.2	IC5000	21	4.8	IC7000	7	0	IC7000	17	2.6	IC7000	27	0.9	IC7000	39	2.1	IC7000	49	5.2	IC7000	59	1.5
	2	15.2		12	0		7	0		2	1.1		12	2.4		22	4.9		8	3.6		18	1.1		28	0.3		40	2.8		50	3.4		60	1.5
	3	0		13	0		8	-15.3		3	3.6		13	4.9		23	0		9	3.6		19	4.9		29	5.0		41	0		51	4.1		61	8.9
	4	-15.3		14	0		9	0		4	2.3		14	0		24	0		10	3.6		20	3.5		30	5.7		42	0		52	3.4		62	2.9
	5	0		15	15.2		10	4.2		5	4.2		15	4.9		1	0		11	0		21	3.4		31	1.3		43	3.3		53	3.4		63	2.9
	6	0.3	IC2300	1	0	IC2300	11	15.2	IC5000	6	4.2	IC5000	16	4.9	IC7000	2	0		12	0.9		22	3.4		32	3.1		44	0		54	0.6		64	2.7
	7	0		2	-4.3		12	-4.3		7	2.4		17	4.9		3	0		13	0		23	5.0		34	0		45	4.2		55	8.9			
	8	0		3	10.0		13	15.2		8	2.6		18	0		4	3.1		14	2.4		24	0		35	0.9		46	3.5		56	4.3			
	9	0		4	0		14	-15.3		9	2.6		19	0		5	3.1		15	4.9		25	4.8		37	0		47	3.8		57	4.9			
	10	0		5	0		15	-15.3		10	1.5		20	4.8		6	3.1		16	2.6		26	4.8		38	2.3		48	4.4		58	3.7			

~ A Board Difference Table ~

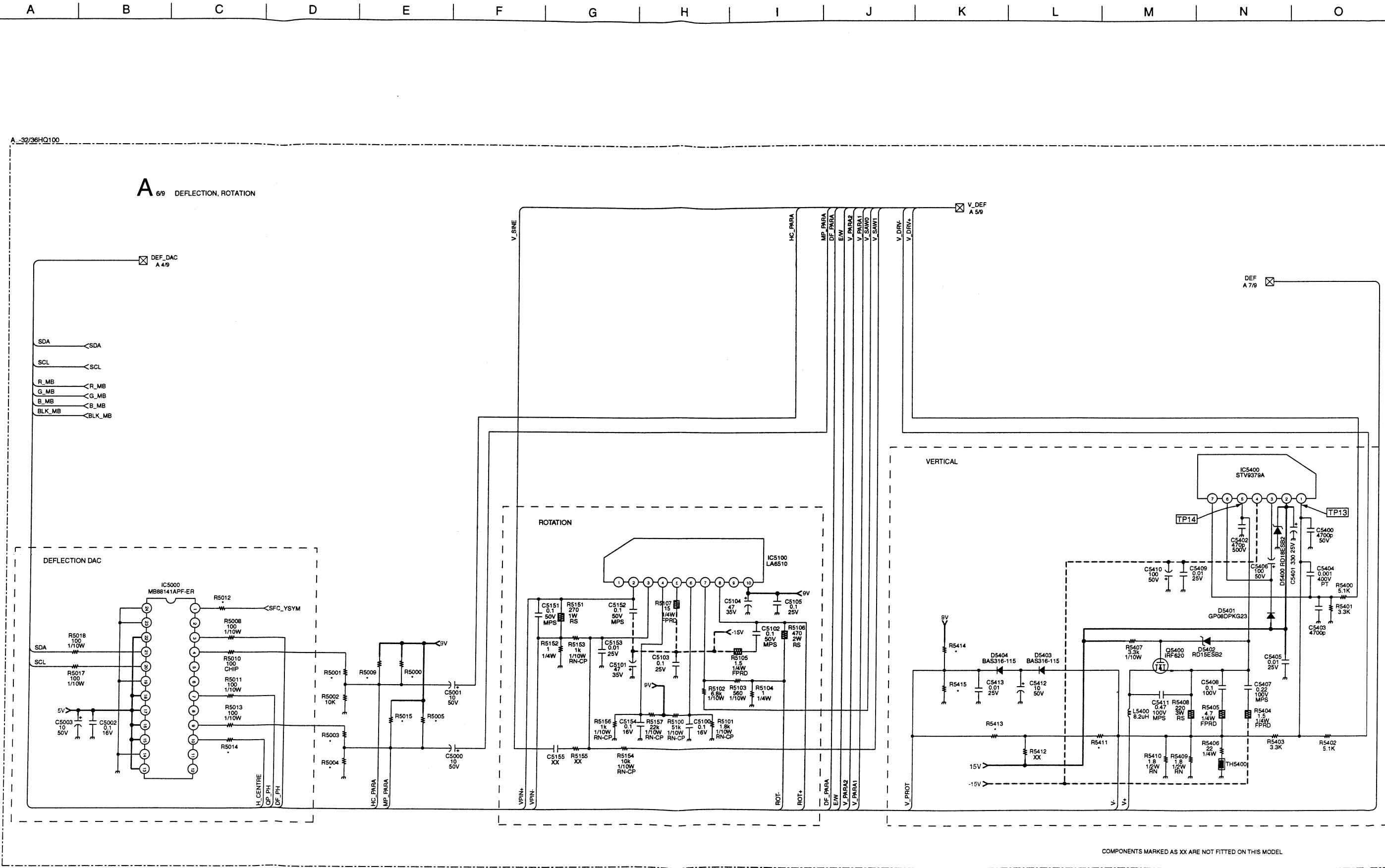
Ref	KV-32HQ100B	KV-32HQ100E	KV-32HQ100K	KV-36HQ100B	KV-36HQ100E	KV-36HQ100K	Ref	KV-32HQ100B	KV-32HQ100E	KV-32HQ100K	KV-36HQ100B	KV-36HQ100E	KV-36HQ100K
C1009	-	-	-	47PF	47PFV	47PF	R5009	-	-	-	220K	220K	220K
C1010	-	-	-	47PF	47PF	47PF	R5012	-	-	-	100	100	100
C1011	-	-	-	47UF	47UF	47UF	R5014	-	-	-	100	100	100
C1013	-	-	-	0.1UF	0.1UF	0.1UF	R5015	33K	33K	33K	100K	100K	100K
C5320	0.0047UF	0.0047UF	0.0047UF	0.01UF	0.01UF	0.01UF	R5310	47K	47K	47K	68K	68K	68K
C5322	-	-	-	0.022UF	0.022UF	0.022UF	R5311	10K	10K	10K	15K	15K	15K
C7030	-	-	-	0.1UF	0.1UF	0.1UF	R5350	6.2K	6.2K	6.2K	6.8K	6.8K	6.8K
CN1017	-	-	-	PLUG, CONNECTOR 4P	PLUG, CONNECTOR 4P	PLUG, CONNECTOR 4P	R5371	0	0	0	-	-	-
CN1018	-	-	-	PLUG, CONNECTOR 4P	PLUG, CONNECTOR 4P	PLUG, CONNECTOR 4P	R5372	0	0	0	-	-	-
CN1019	-	-	-	CONNECTOR USB(A)	CONNECTOR USB(A)	CONNECTOR USB(A)	R5411	4.7K	4.7K	4.7K	2.7K	2.7K	2.7K
CN5010	-	-	-	PLUG, CONNECTOR 3P	PLUG, CONNECTOR 3P	PLUG, CONNECTOR 3P	R5413	10K	10K	10K	8.2K	8.2K	8.2K
D1009	-	-	-	DAN202K	DAN202K	DAN202K	R5414	100K	100K	100K	68K	68K	68K
D1010	-	-	-	DAP202K	DAP202K	DAP202K	R5415	47K	47K	47K	27K	27K	27K
D1011	-	-	-	UDZSTE-175.6B	UDZSTE-175.6B	UDZSTE-175.6B	R5821	5.6K	5.6K	5.6K	10K	10K	10K
D7012	-	-	-	1SS355TE-17	1SS355TE-17	1SS355TE-17	R7043	-	-	-	2.2K	2.2K	2.2K
L5300	10MH	10MH	10MH	6.8MH	6.8MH	6.8MH	R7044	-	-	-	2.2K	2.2K	2.2K
L5301	10MH	10MH	10MH	4.7MH	4.7MH	4.7MH	R7045	-	-	-	2.2K	2.2K	2.2K
L5302	-	-	-	3.3MH	3.3MH	3.3MH	R7046	-	-	-	10K	10K	10K
Q7006	-	-	-	MSB709-RT1	MSB709-RT1	MSB709-RT1	R7047	-	-	-	10K	10K	10K
Q7007	-	-	-	MSB709-RT1	MSB709-RT1	MSB709-RT1	R7048	-	-	-	10K	10K	10K
Q7008	-	-	-	MSB709-RT1	MSB709-RT1	MSB709-RT1	R7049	-	-	-	10K	10K	10K
Q7009	-	-	-	MSD601-RST1	MSD601-RST1	MSD601-RST1	R7050	-	-	-	4.7K	4.7K	4.7K
Q7010	-	-	-	MSD601-RST1	MSD601-RST1	MSD601-RST1	R7052	-	-	-	4.7K	4.7K	4.7K
R1050	-	-	-	15K	15K	15K	R7053	-	-	-	2.2K	2.2K	2.2K
R1051	-	-	-	15K	15K	15K	R7054	-	-	-	2.2K	2.2K	2.2K
R1052	-	-	-	33	33	33	R7055	-	-	-	2.2K	2.2K	2.2K
R1053	-	-	-	33	33	33	R7058	-	-	-	2.2K	2.2K	2.2K
R1054	0	0	0	-	-	-	R7059	-	-	-	1K	1K	1K
R1056	-	-	-	0	0	0	R7062	-	-	-	10K	10K	10K
R5000	47K	47K	47K	68K	68K	68K	R7063	-	-	-	470	470	470
R5001	47K	47K	47K	68K	68K	68K	R7065	-	-	-	100K	100K	100K
R5003	47K	47K	47K	22K	22K	22K	TH5000	-	-	-	THERMISTOR	THERMISTOR	THERMISTOR
R5004	10K	10K	10K	8.2K	8.2K	8.2K	TU1100	BTF-EF412	BTF-EC412	BTF-EC412	BTF-EF412	BTF-EC412	BTF-EC412
R5005	22K	22K	22K	15K	15K	15K	TU1200	BTF-EF412	BTF-EC412	BTF-EC412	BTF-EF412	BTF-EC412	BTF-EC412
R5007	-	-	-	560K	560K	560K							

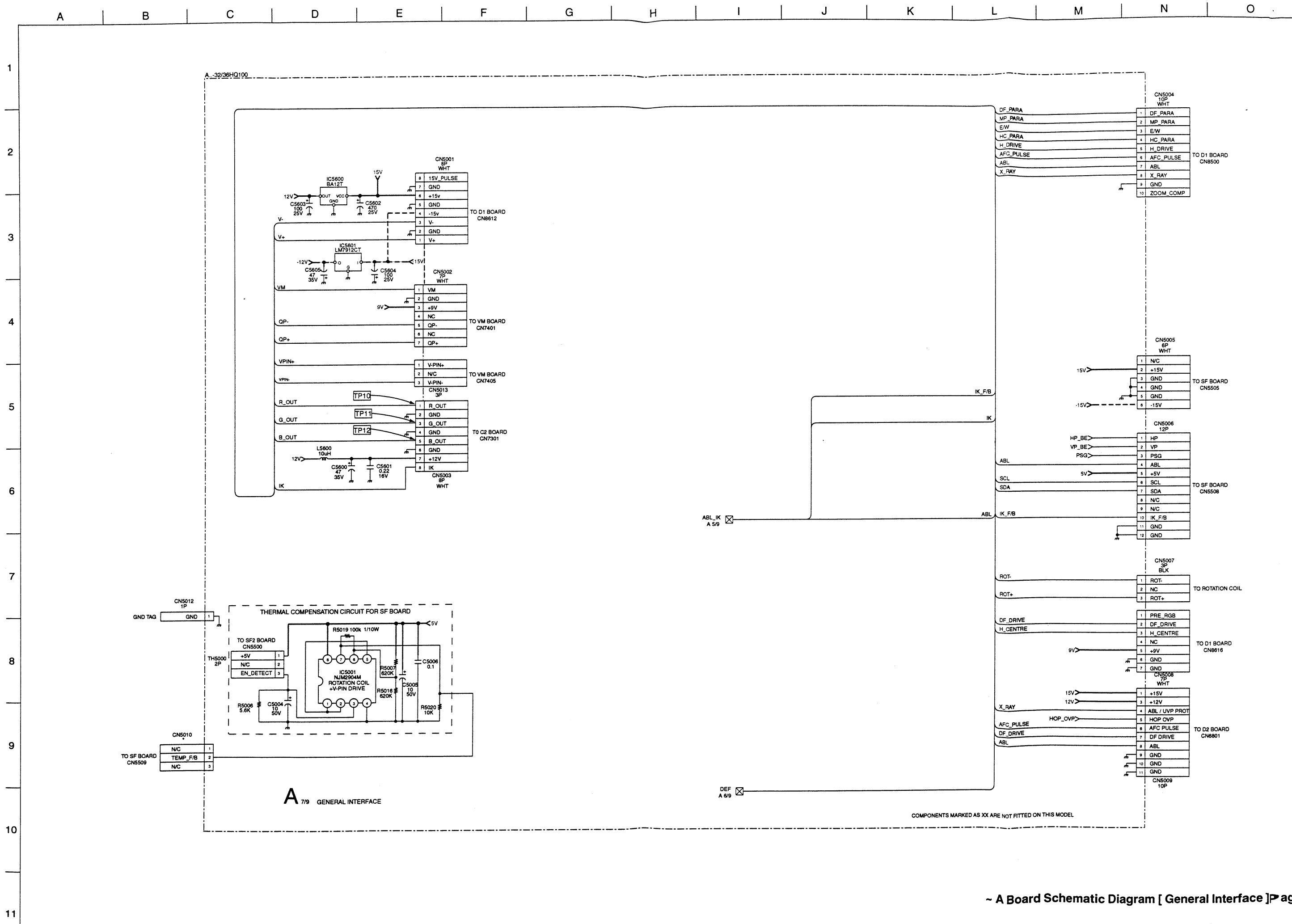
~ A Board Waveforms ~





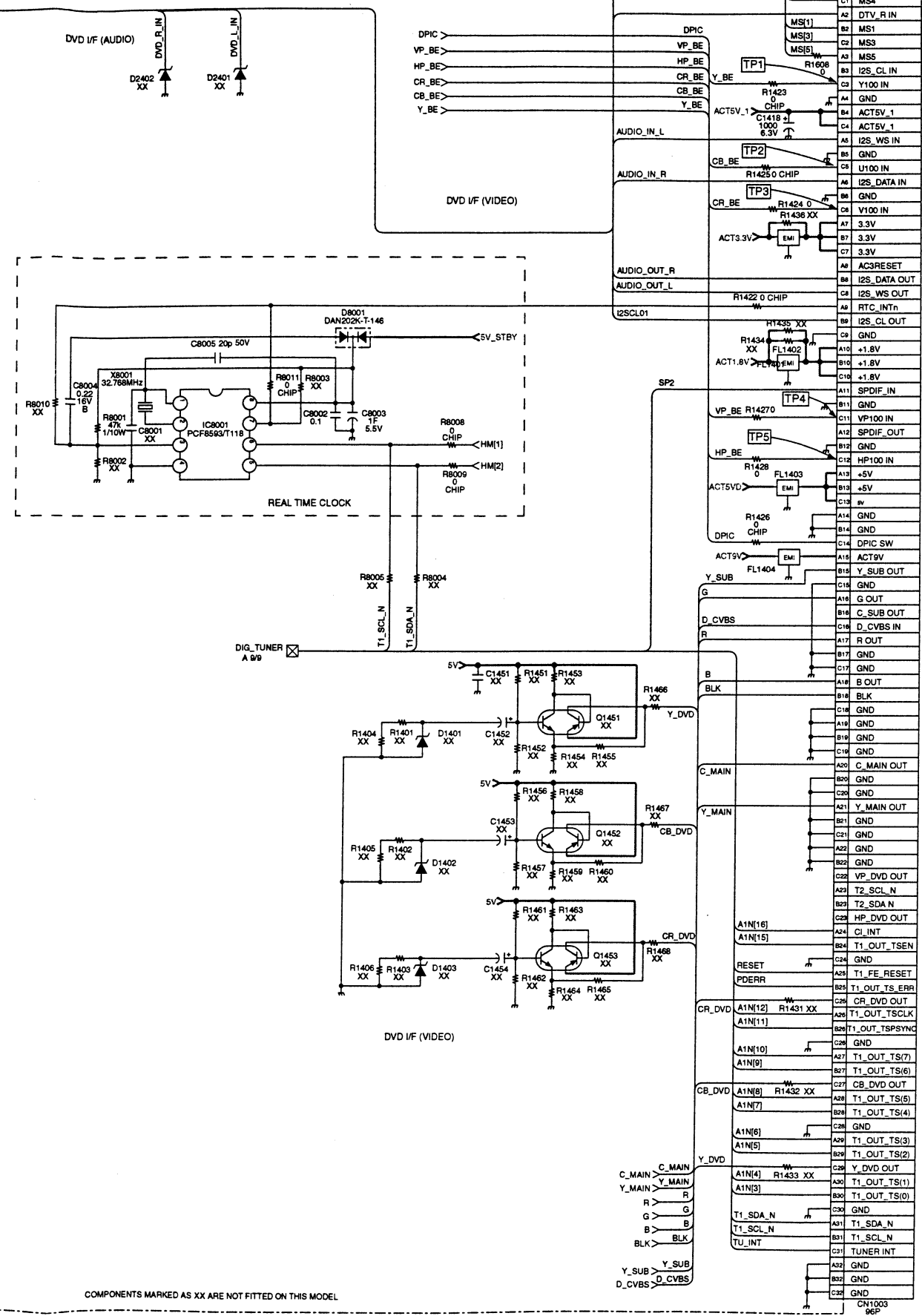
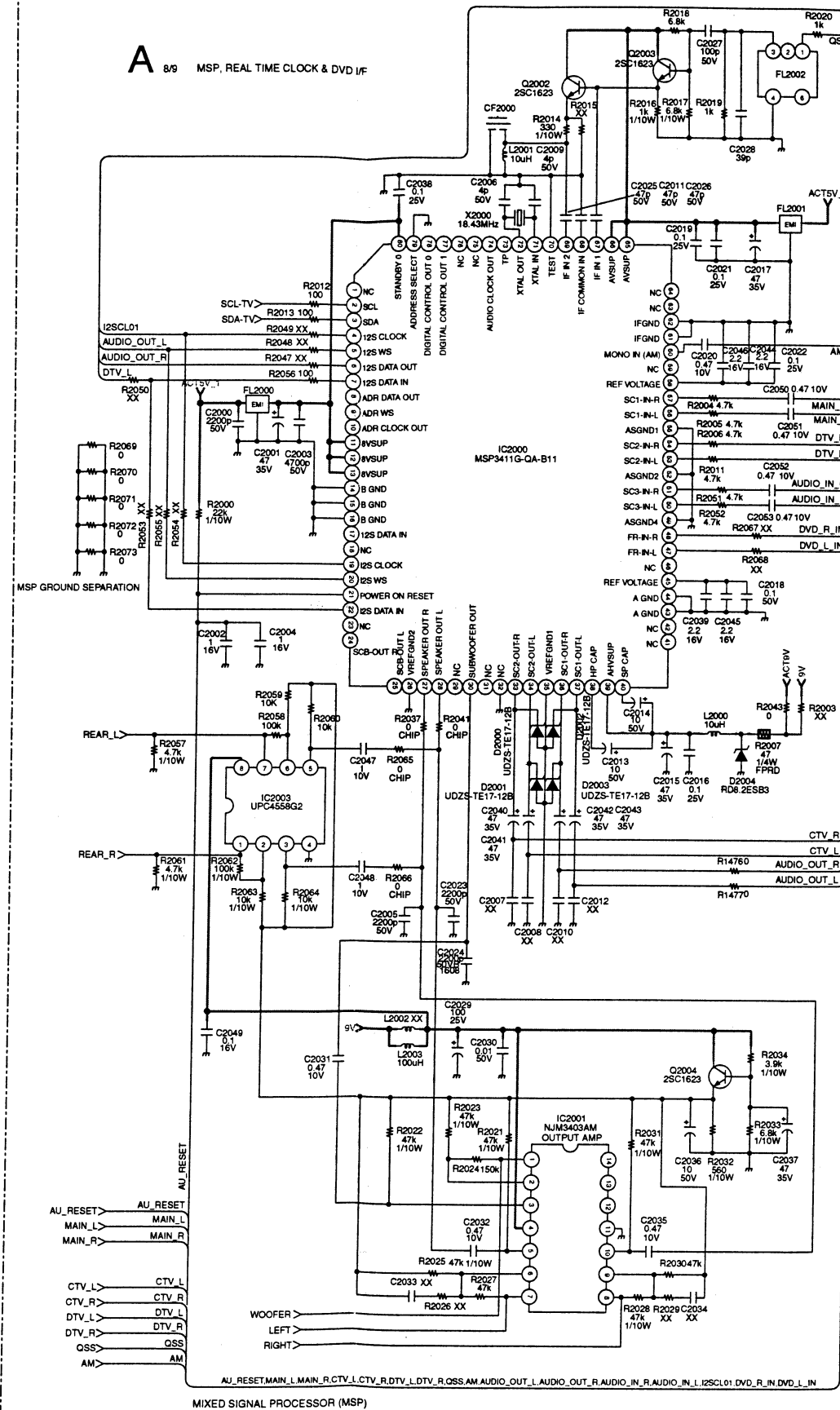






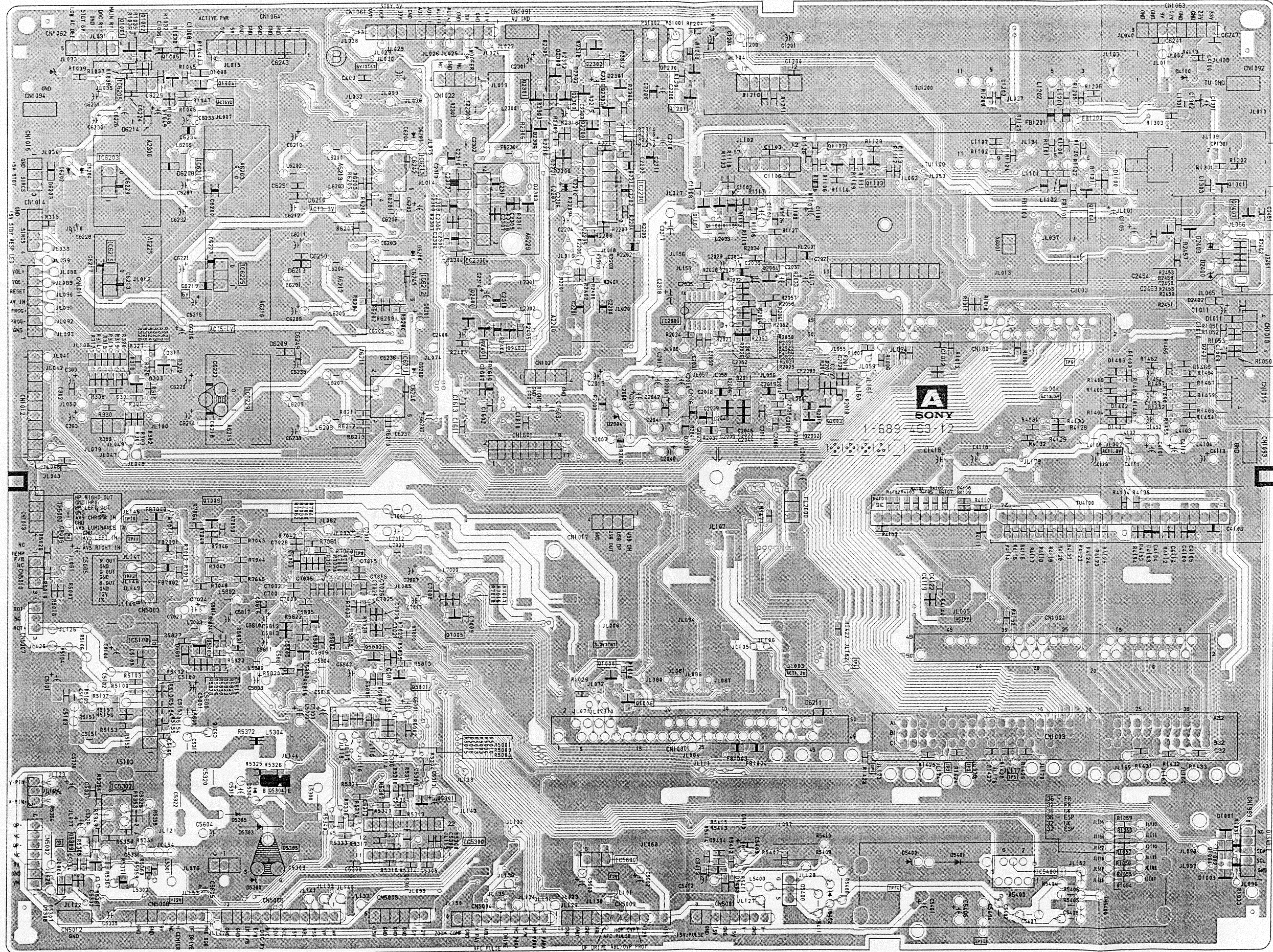
A-32/36HQ100

A 8/9 MSP, REAL TIME CLOCK & DVD I/F



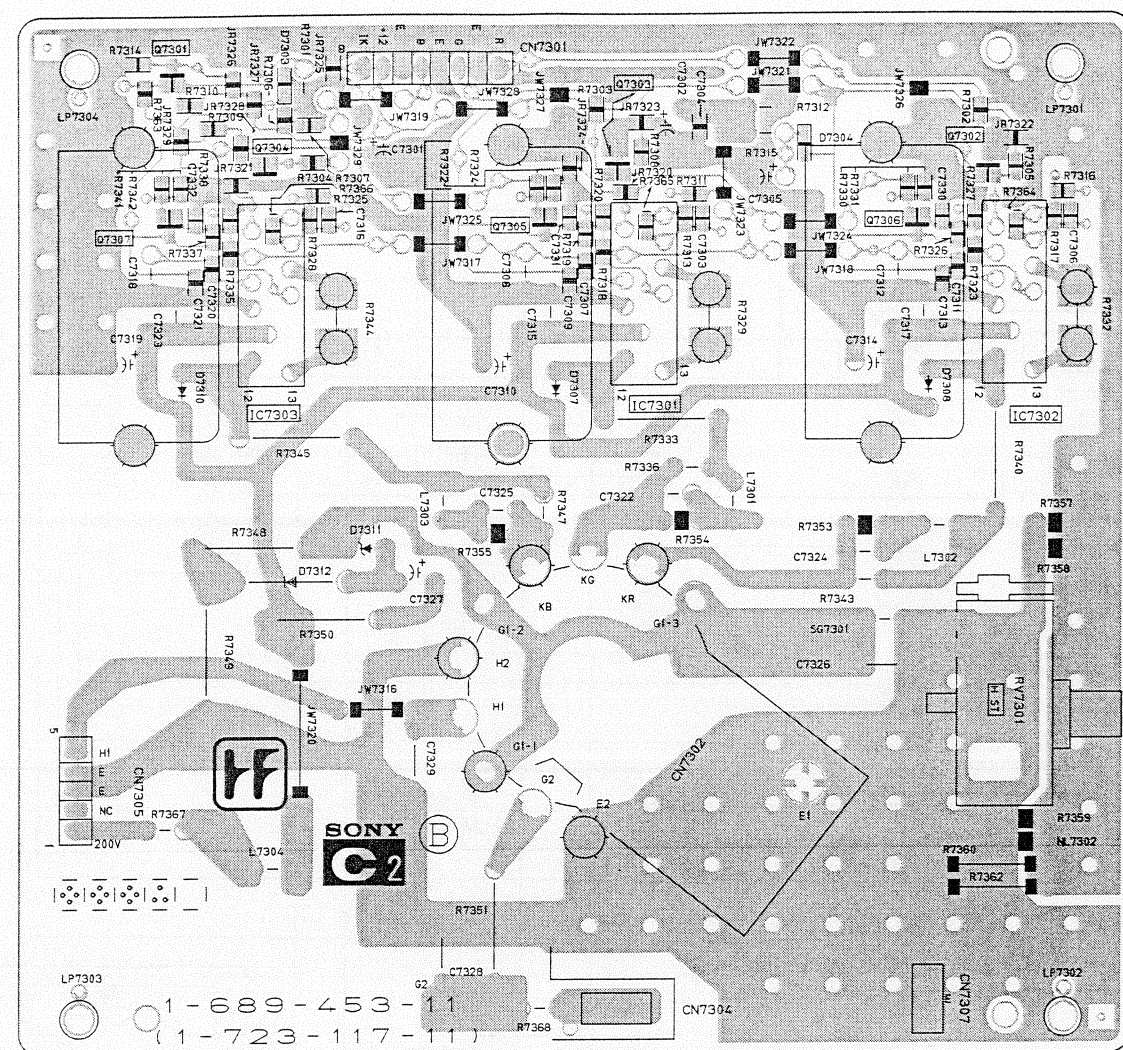
A B C D E F G H I J K L M N O

1
2
3
4
5
6
7
8
9
10

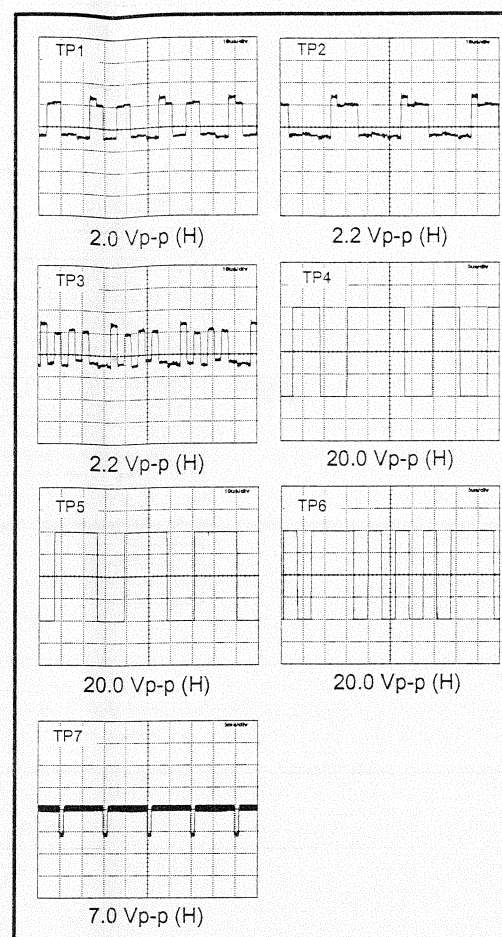


- A Printed Wiring Board Conductor Side B -

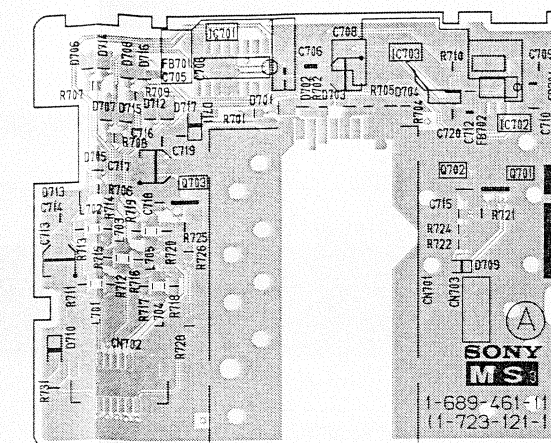
~ C2 Printed Wiring Board Conductor Side ~



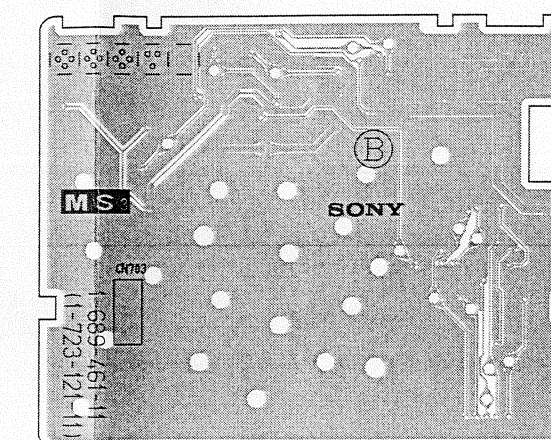
~ C2 Board Waveforms ~



~ MS3 Printed Wiring Board Conductor Side A ~



~ MS3 Printed Wiring Board Conductor Side B ~



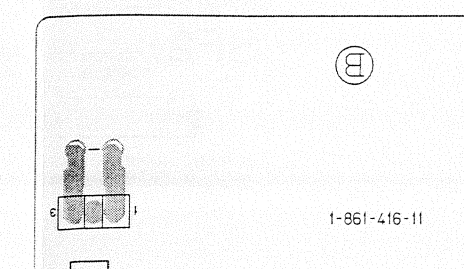
~ C2 Board Semiconductor Voltage Table ~

Ref	(e)	(b)	(c)
Q7301	5.5	7.1	0
Q7306	10.3	11.3	12.0
Q7302	3.6	2.8	0
Q7303	3.6	2.9	0
Q7304	3.7	2.9	0
Q7307	10.4	11.4	12.0
Q7305	9.4	10.5	12.0

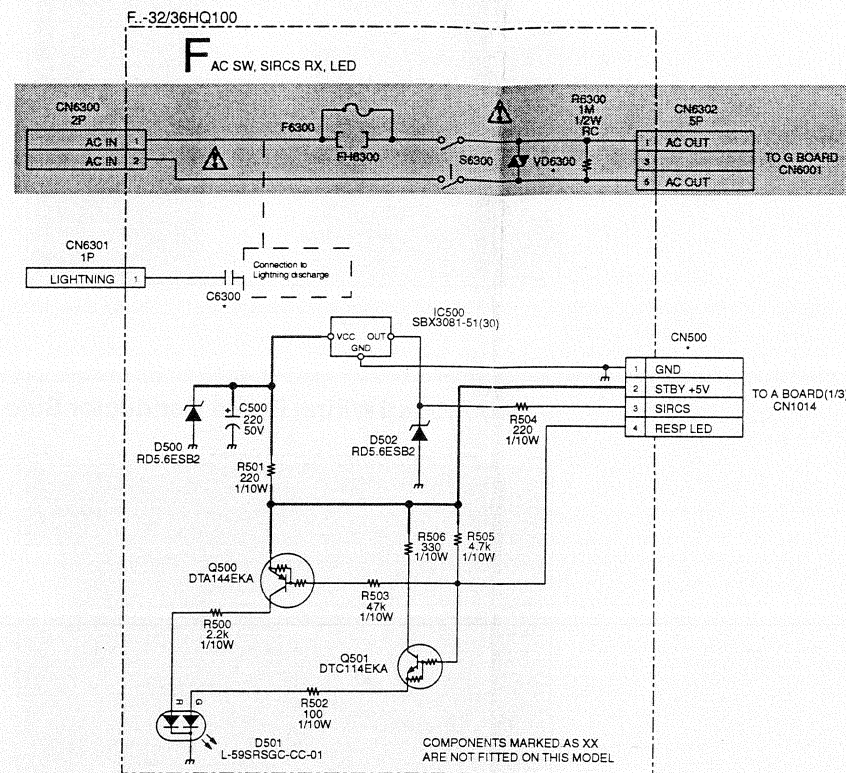
~ C2 Board IC Voltage Table ~

Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)	Ref No	Pin No	Volts (V)
IC7302	1	2.7	IC7301	1	2.7	IC7303	1	2.7
	2	3.6		2	3.6		2	3.8
	3	2.9		3	3.0		3	2.9
	4	3.7		4	3.7		4	3.7
	5	2.0		5	2.1		5	2.0
	6	12.0		6	11.9		6	12.0
	7	11.4		7	10.7		7	11.5
	8	0		8	0		8	0
	10	211.6		10	211.5		10	211.6
	12	153.1		12	151.0		12	143.0
	13	145.0		13	142.6		13	136.4

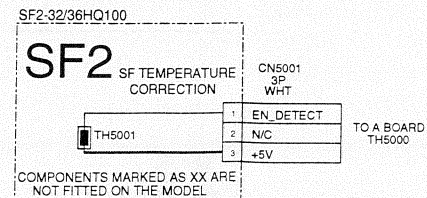
~ SF2 Printed Wiring Board Conductor Side ~



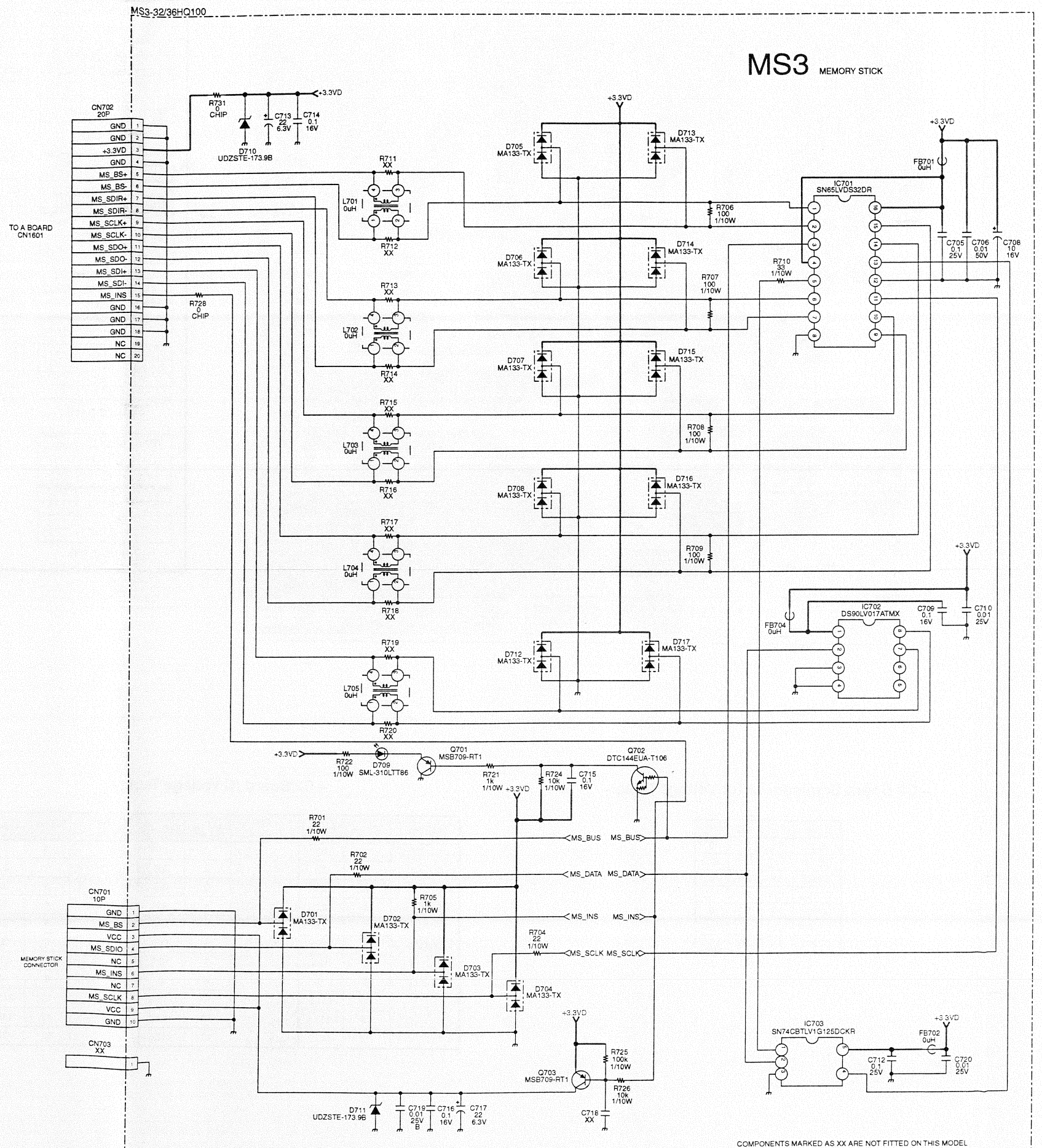
~ F Board Schematic Diagram [AC SW, SIRCS RX, LED] ~



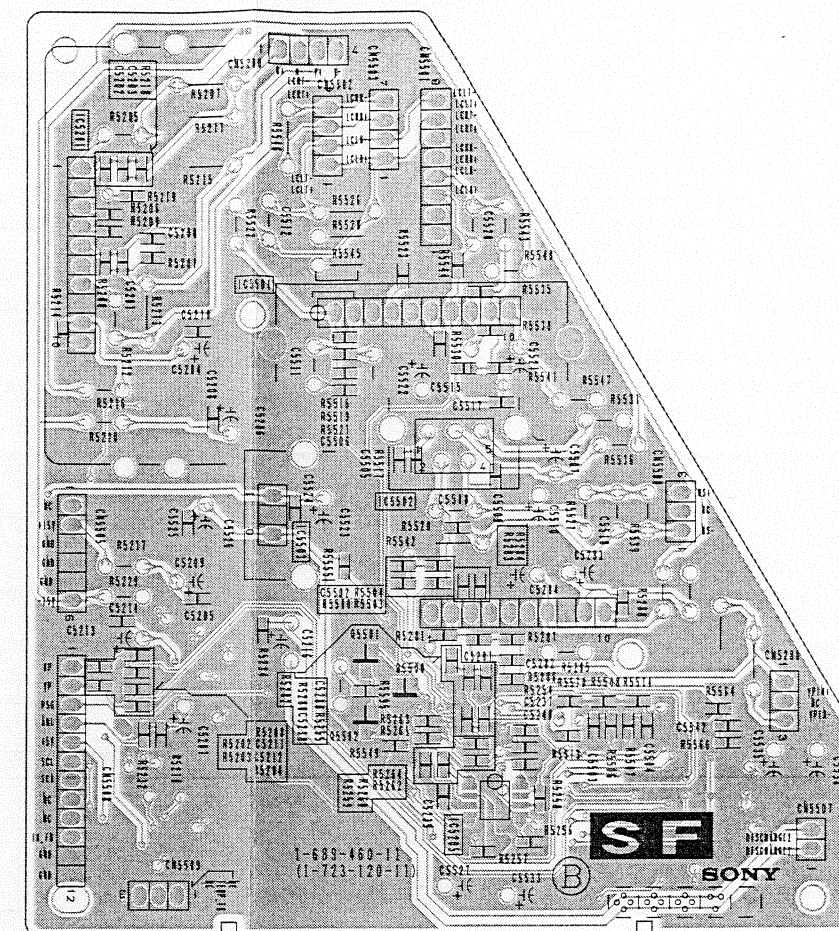
~ SF2 Board Schematic Diagram [SF Temperature Correction] ~



~ MS3 Board Schematic Diagram [Memory Stick] ~



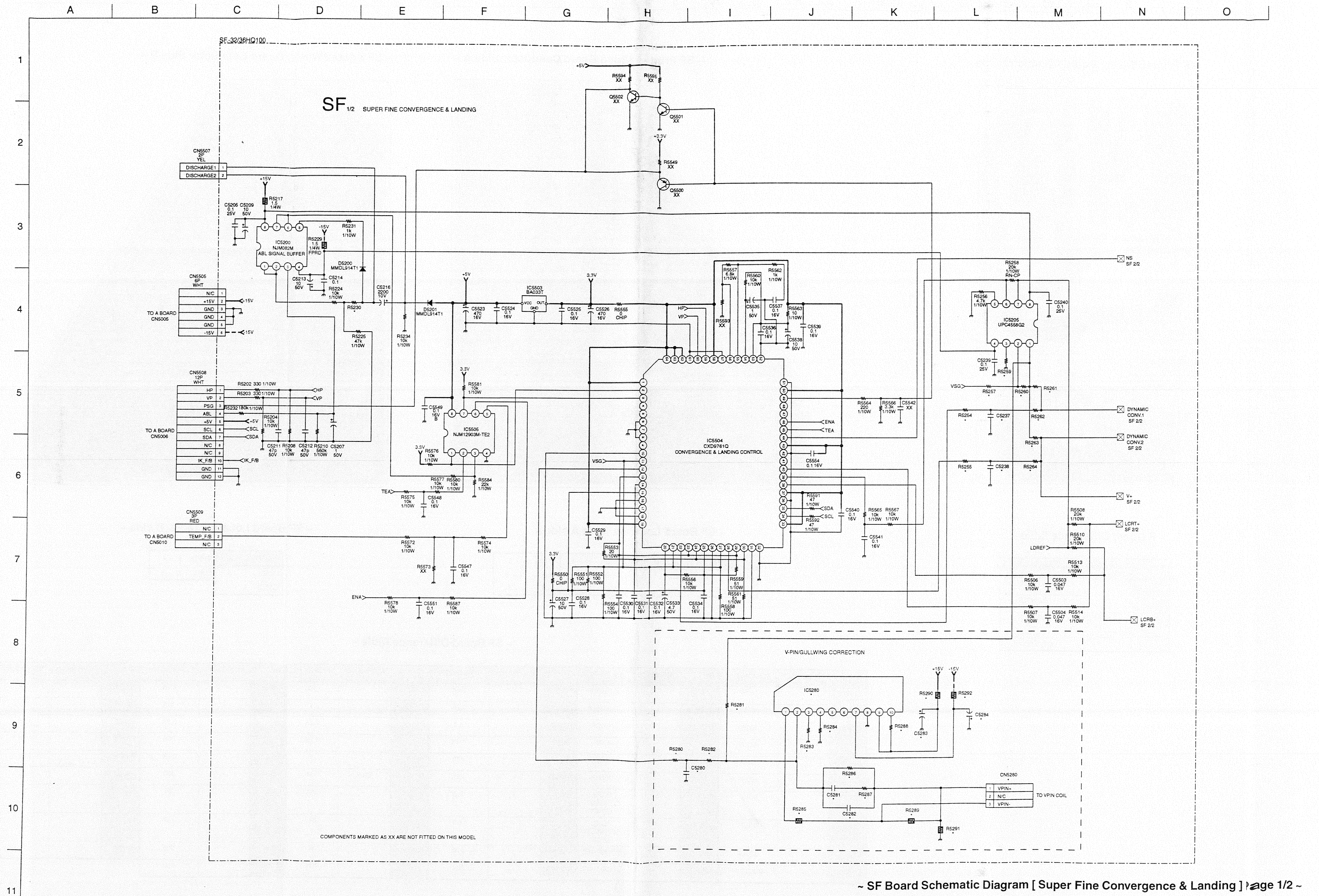
~ SF Printed Wiring Board Conductor Side B ~

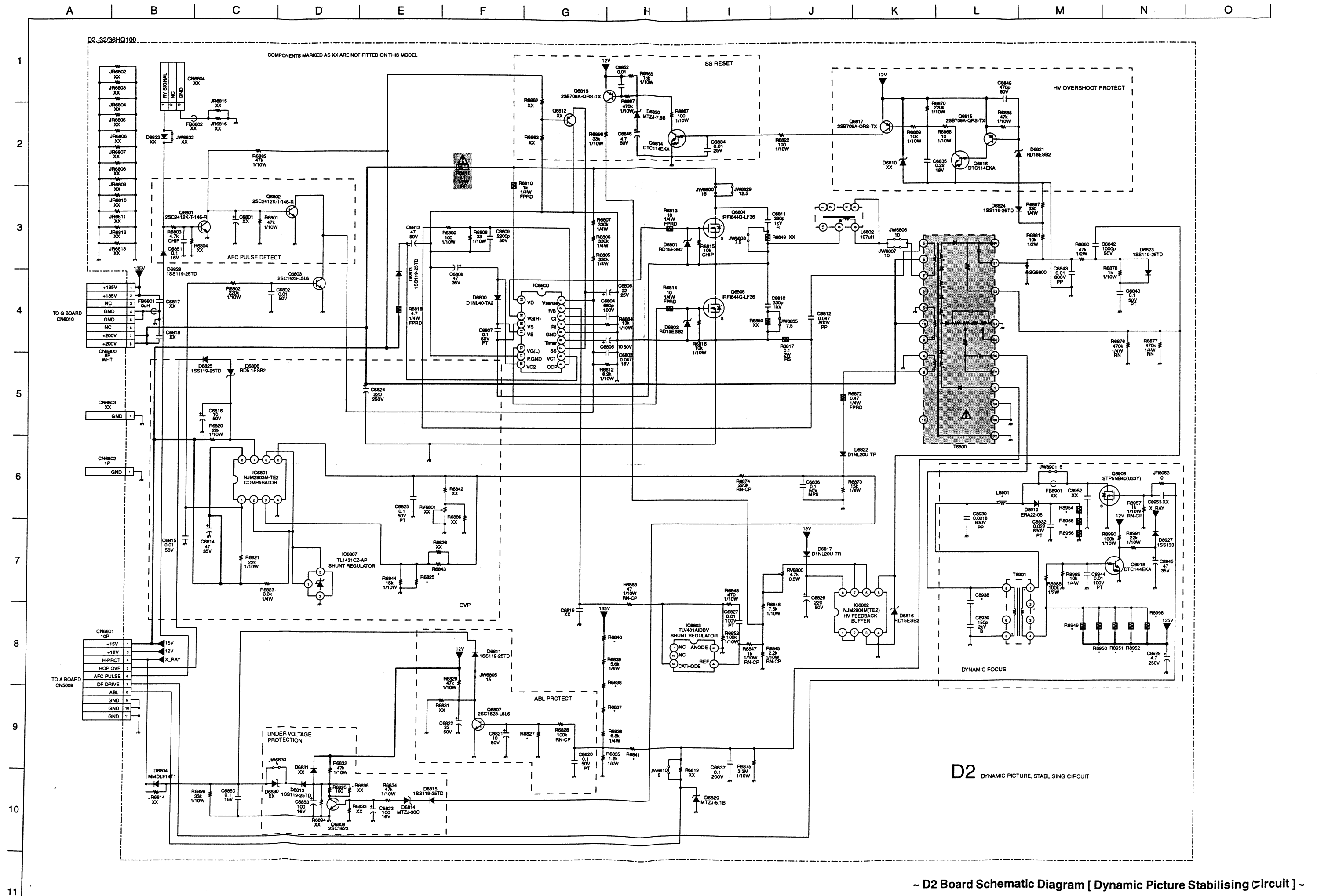


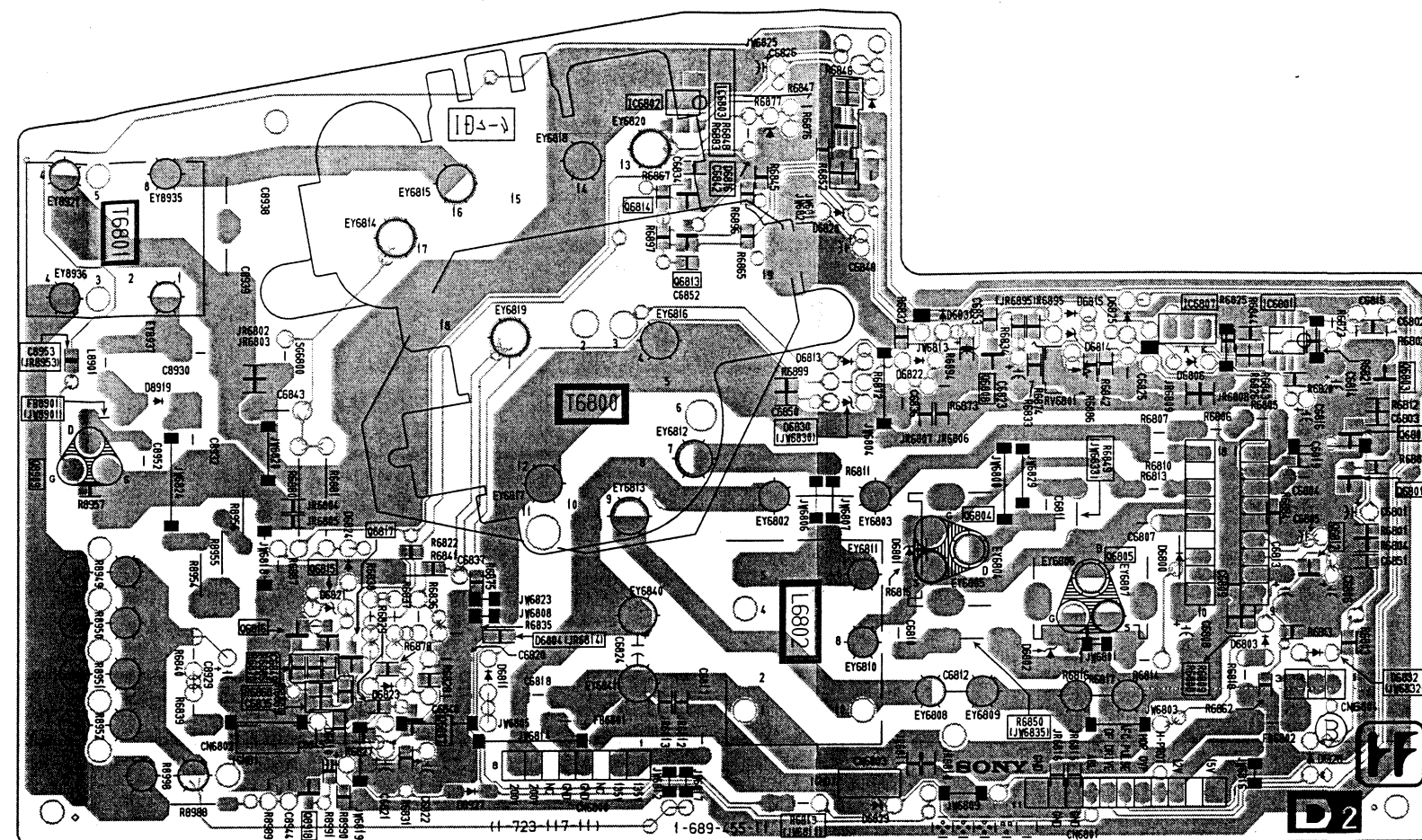
~ SF Board Location Table B side ~

IC		IC5503	L - 4
IC5501	L - 3	IC5505	M - 5
IC5502	M - 4		

Ref	KV-32HQ100	KV-36HQ100	Ref	KV-32HQ100	KV-36HQ100	Ref	KV-32HQ100	KV-36HQ100	Ref	KV-32HQ100	KV-36HQ100	Ref	KV-32HQ100	KV-36HQ100	Ref	KV-32HQ100	KV-36HQ100
C5200	-	100PF	C5238	-	0.0033UF	R5200	-	5.6K	R5215	-	3.3	R5259	-	4.7K	R5284	-	1.2K
C5201	-	47PF	C5280	-	0.0033UF	R5201	-	2.2K	R5216	-	1	R5260	-	10K	R5285	-	1.5
C5202	-	100PF	C5281	-	100PF	R5205	-	1.5	R5218	-	5.6K	R5261	-	3.3K	R5286	-	5.6K
C5203	-	47UF	C5282	-	47PF	R5206	-	1.2K	R5219	-	2.2K	R5262	-	300	R5287	-	2.2K
C5204	-	100UF	C5283	-	100UF	R5207	-	270	R5220	-	1	R5263	-	3.3K	R5288	-	68K
C5206	-	100UF	C5284	-	100UF	R5209	-	1.2K	R5230	680K	1M	R5264	-	300	R5289	-	270
C5208	-	0.1UF	CN5200	-	PLUG, CONNECT- OR 4P	R5211	-	3.3	R5233	-	51K	R5280	-	3K	R5290	-	1
C5210	-	0.1UF	CN5280	-	PLUG, CONNECT- OR 3P	R5212	-	1.5	R5254	-	3K	R5281	-	3.3K	R5291	-	3.3
C5215	-	0.01UF	IC5201	-	STK391-120	R5213	-	270	R5255	-	3K	R5282	-	300	R5292	-	1
C5237	-	0.0033UF	IC5280	-	STK391-120	R5214	-	68K	R5257	-	10K	R5283	-	1.2K			







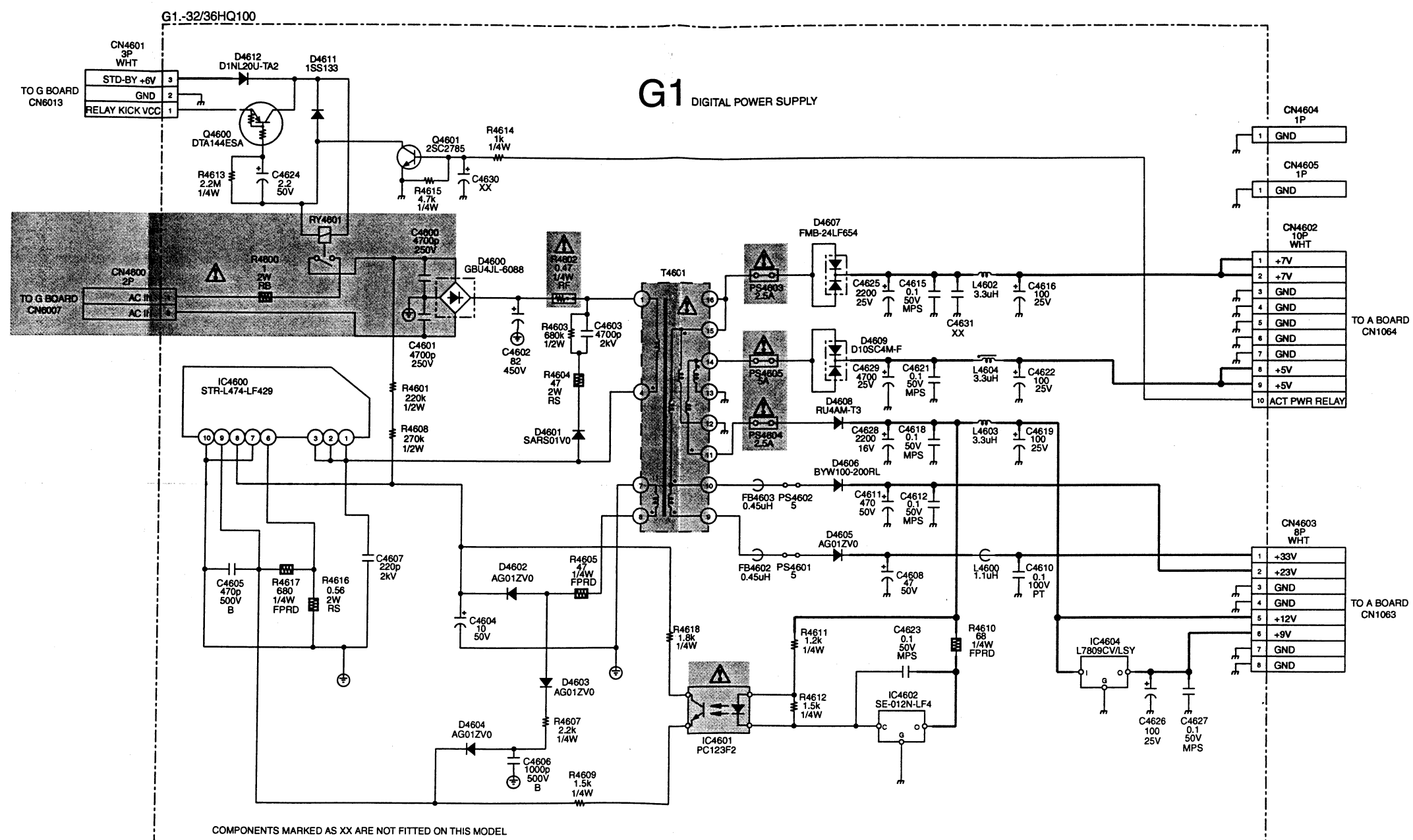
~ D2 Board Location Table ~

Ref No	Pin No	Voltage (V)	Ref No	Pin No	Voltage (V)
IC6800	1	1.6	IC6802	1-4	0
	2	1.8		5	6.8
	3	2.3		6	6.7
	4	2.5		7	6.7
	5-6	0	IC6803	8	14.2
	7	4.6		1-2	0
	8	13.9		3	1.7
	9	0		4	1.2
	10	10.2	IC6807	5	0
	11	0		1	2.5
	12	4.4		2	0
	18	196.0		3	2.5
IC6801	1	0			
	2	2.5			
	3	2.1			
	4	0			
	5	2.2			
	6	2.5			
	7	0			
	8	14.7			

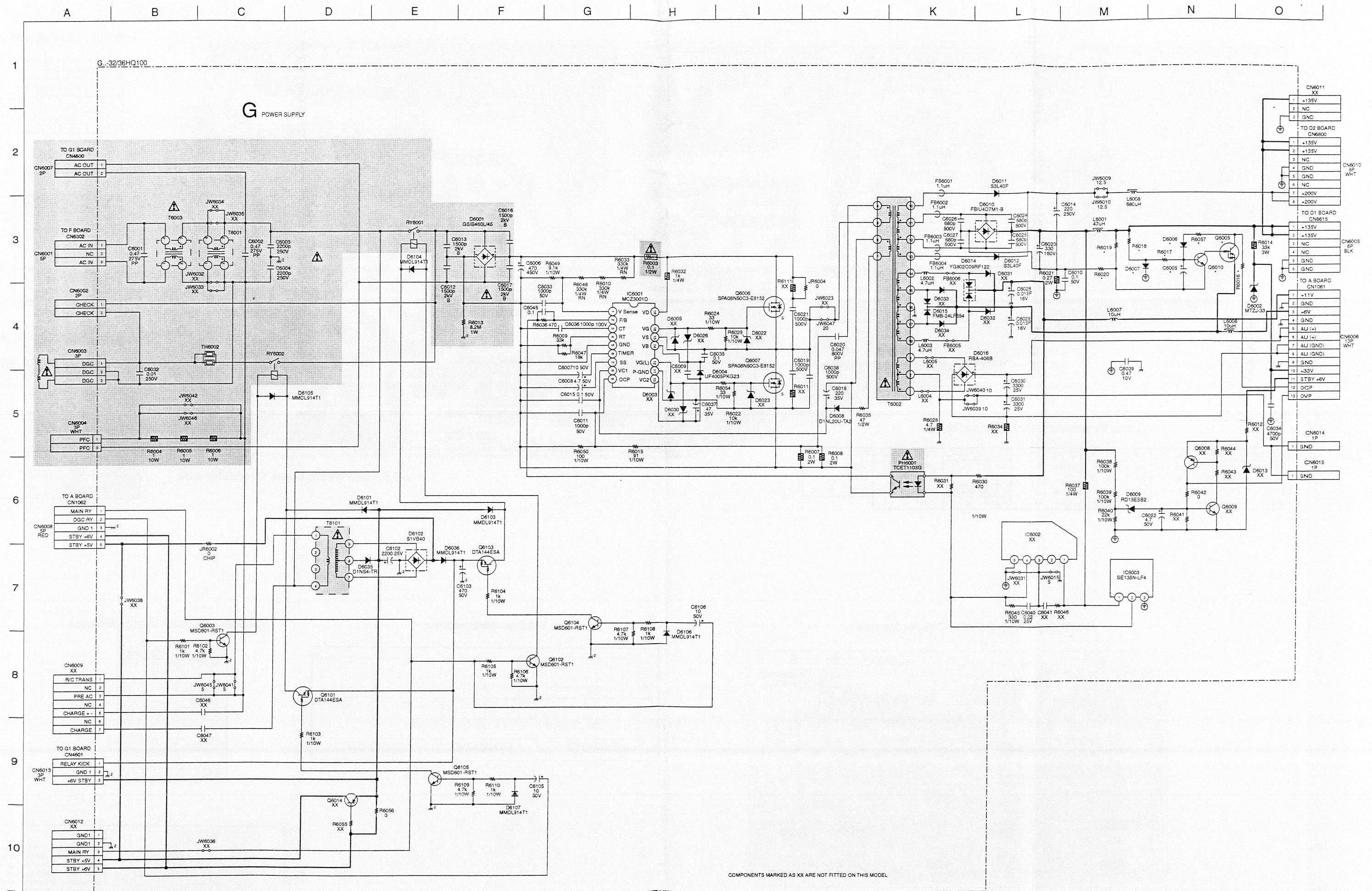
Ref	KV-32HQ100	KV-36HQ100
C8938	-	150PF
IC6800	MCZ3001DA	MCZ3001D
L8901	4.7MH	3.3MH
R6825	150K	-
R6827	33K	56K
R6837	5.6K	6.8K
R6838	5.6K	6.8K
R6840	5.6K	6.8K
R6841	1K	560
R6843	820	1K
R8949	8.2K	4.7K
R8950	8.2K	6.8K
R8951	8.2K	4.7K
R8952	8.2K	4.7K
R8954	100K	33K
R8955	100K	33K
R8956	100K	100K
R8998	8.2K	4.7K

DIODE		D6803 O - 5	D6813 L - 3	D6817 L - 2	D6823 J - 5	D8919 H - 3	IC6801 O - 3	TRANSISTOR		Q6804 M - 4	Q6813 K - 2	Q6817 I - 5
D6800 N - 4	D6804 J - 5	D6814 N - 3	D6820 L - 2	D6824 I - 4	D8927 J - 6	IC6802 K - 1	Q6801 O - 4	Q6805 N - 4	Q6814 K - 2	Q6809 H - 3		
D6801 M - 4	D6806 N - 3	D6815 N - 3	D6821 I - 5	D6825 N - 3	IC		IC6803 L - 2	Q6802 O - 3	Q6807 J - 5	Q6815 I - 4	Q6818 I - 6	
D6802 N - 5	D6811 J - 5	D6816 L - 2	D6822 M - 3	D6828 O - 5	IC6800 N - 4	IC6807 O - 3	Q6803 O - 3	Q6808 M - 3	Q6816 I - 4			

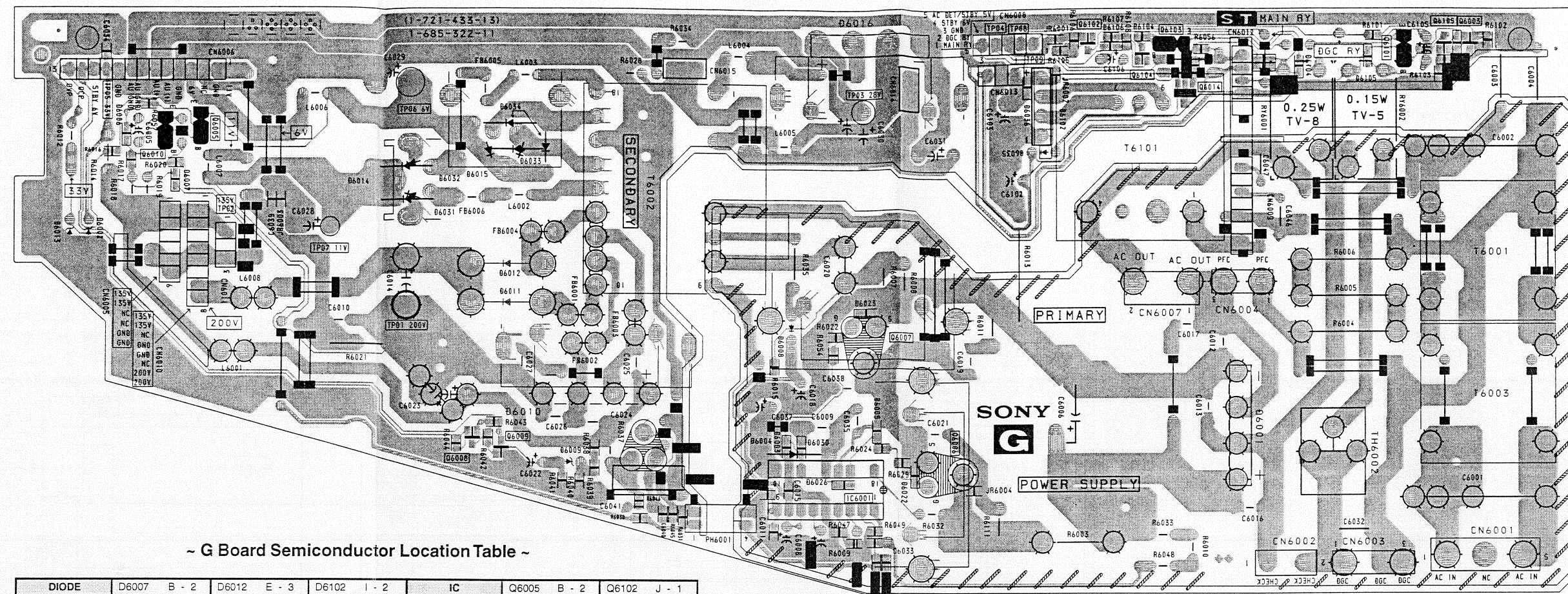
Ref	(e)	(b)	(c)
Q6801	0	0.6	0
Q6802	0	0	1.6
Q6803	0	0	1.6
Q6807	0	0.6	0
Q6808	0	0.6	0
Q6813	11.9	11.4	1.2
Q6814	0	0	11.9
Q6815	11.9	11.9	0
Q6816	0	0	11.7
Q6817	11.9	11.7	0
Q8918	0	6.4	0



~ G1 Board Schematic Diagram [Digital Power Supply] ~



~ G Board Schematic Diagram [Power \$ upply] ~



~ G Board Semiconductor Location Table ~

DIODE		D6007	B - 2	D6012	E - 3	D6102	I - 2	IC		Q6005	B - 2	Q6102	J - 1
D6001	K - 4	D6008	G - 3	D6014	D - 2	D6104	K - 1	IC6001	H - 5	Q6006	H - 4	Q6103	J - 1
D6002	A - 2	D6009	E - 4	D6015	E - 2	D6105	L - 1	IC6003	F - 4	Q6007	H - 3	Q6104	J - 1
D6004	G - 4	D6010	E - 4	D6016	H - 1	D6106	J - 1	TRANSISTOR		Q6010	B - 2	Q6105	M - 1
D6006	B - 2	D6011	E - 3	D6035	I - 2	D6107	M - 1	Q6003	M - 1	Q6101	L - 1		

~ G Board IC Voltages ~

IC Voltage Table		
Ref No	Pin No	Voltage (V)
IC6003	1	134.0
	2	11.3
	3	0

~ G Board Semiconductor Voltages ~

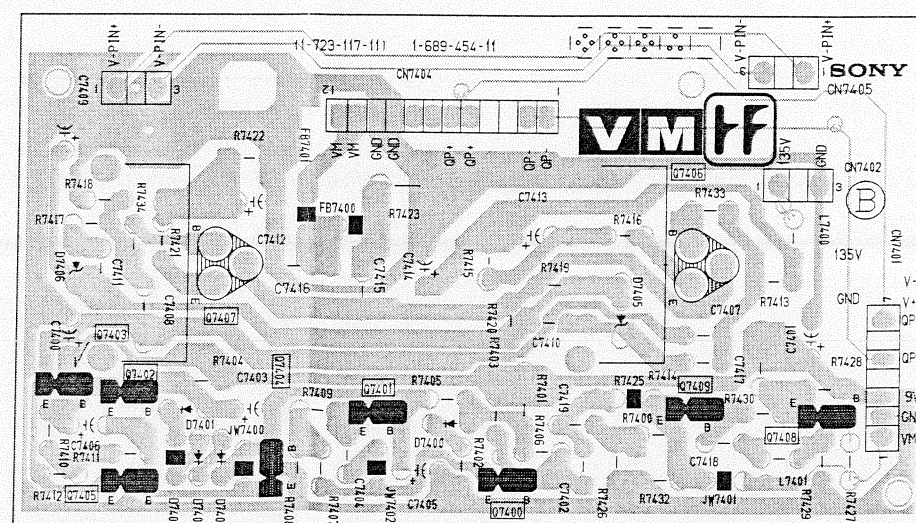
Ref	(e)	(b)	(c)
Q6003	0	0.3	10.9
Q6005	7.1	6.9	0.6
Q6010	0	0.5	6.9
Q6101	23.8	23.6	11.0
Q6102	0	0.7	0
Q6103	23.7	23.4	10.4
Q6104	0	0	23.4
Q6105	0	0	23.6

~ G Board Difference Table ~

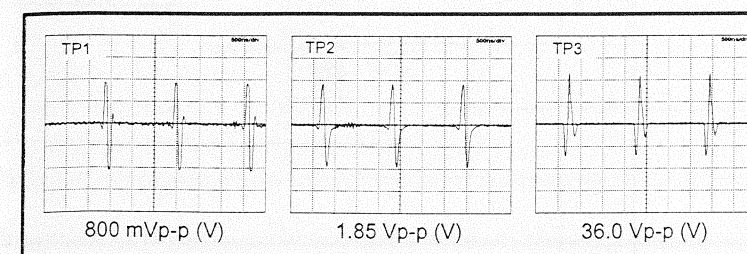
Ref	KV-32HQ100	KV-36HQ100
C6005	22UF	-
D6006	MMDL914T1	-
D6007	MMDL914T1	-
Q6005	DTA144ESA	-
Q6010	2SC2785-HFE	-
R6016	1K	-
R6017	10K	-
R6018	470K	-
R6019	330K	-
R6020	820	-
R6057	4.7K	-

~ G Printed Wiring Board Conductor side ~

~ VM Printed Wiring Board Conductor side ~

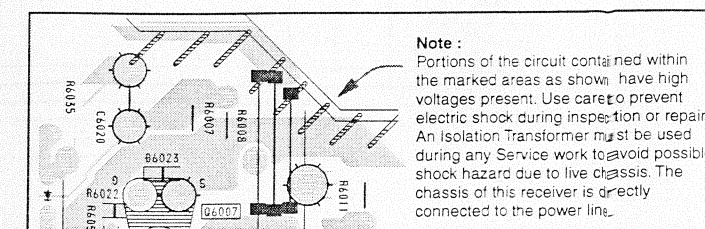


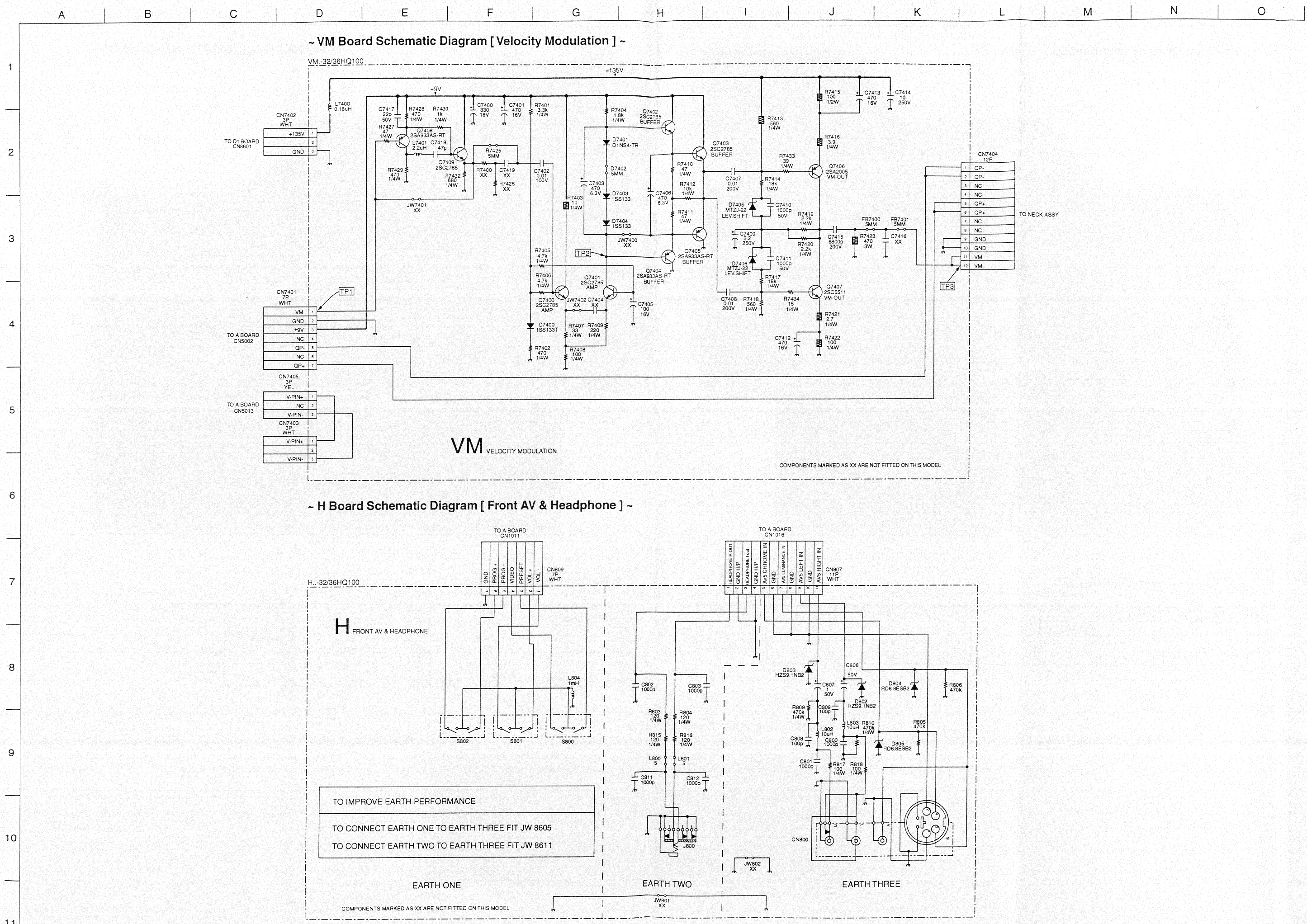
~ VM Board Waveforms ~



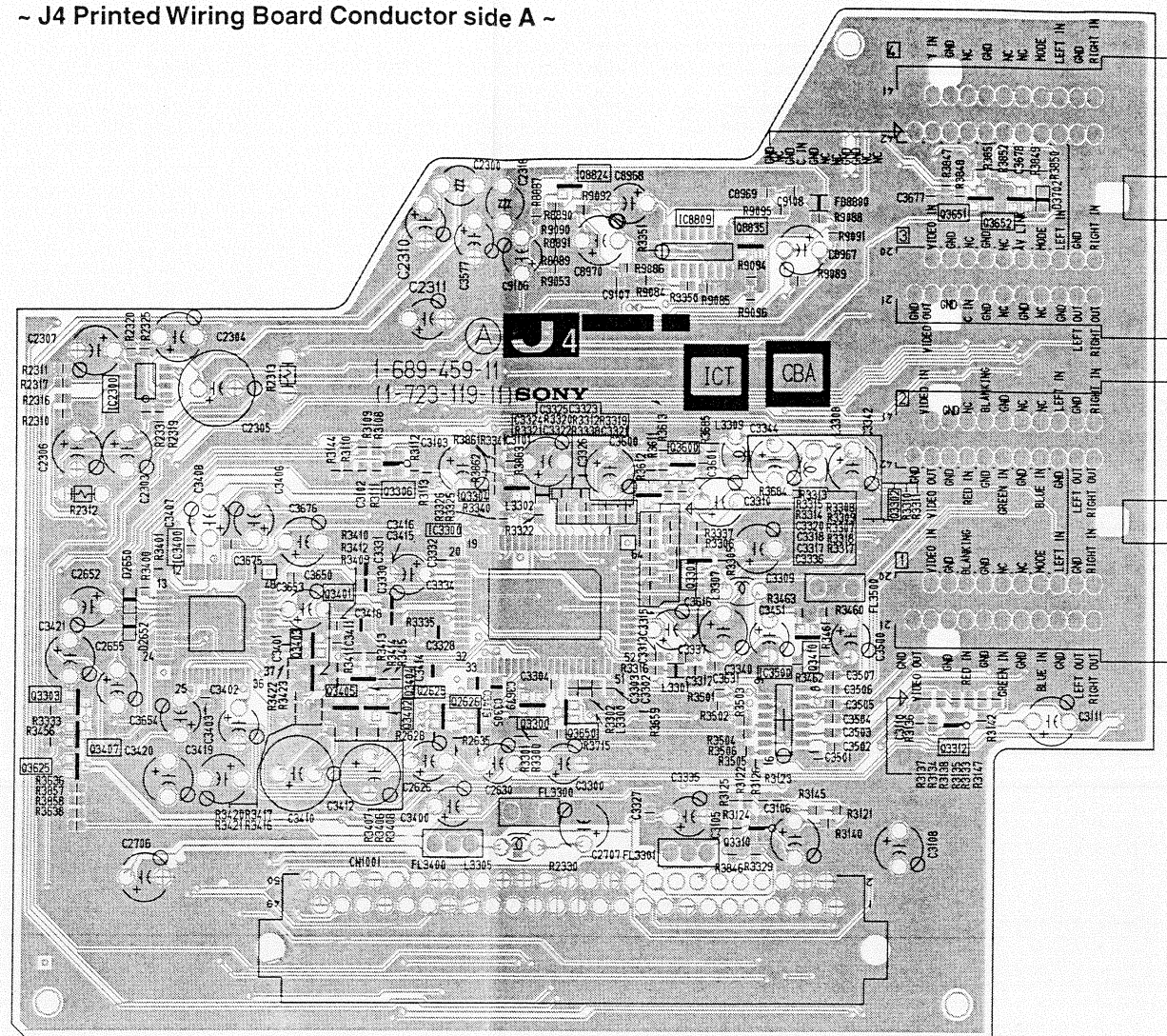
~ VM Board Semiconductor Voltages ~

Ref	(e)	(b)	(c)
Q7400	0.9	1.5	8.8
Q7401	0.9	1.6	5.0
Q7402	5.8	6.4	8.8
Q7403	5.6	5.8	8.8
Q7404	5.6	5.0	0
Q7405	5.6	5.6	0
Q7406	133.9	133.6	67.2
Q7407	1.0	1.3	67.2
Q7408	3.9	3.1	3.9
Q7409	3.9	3.2	8.8

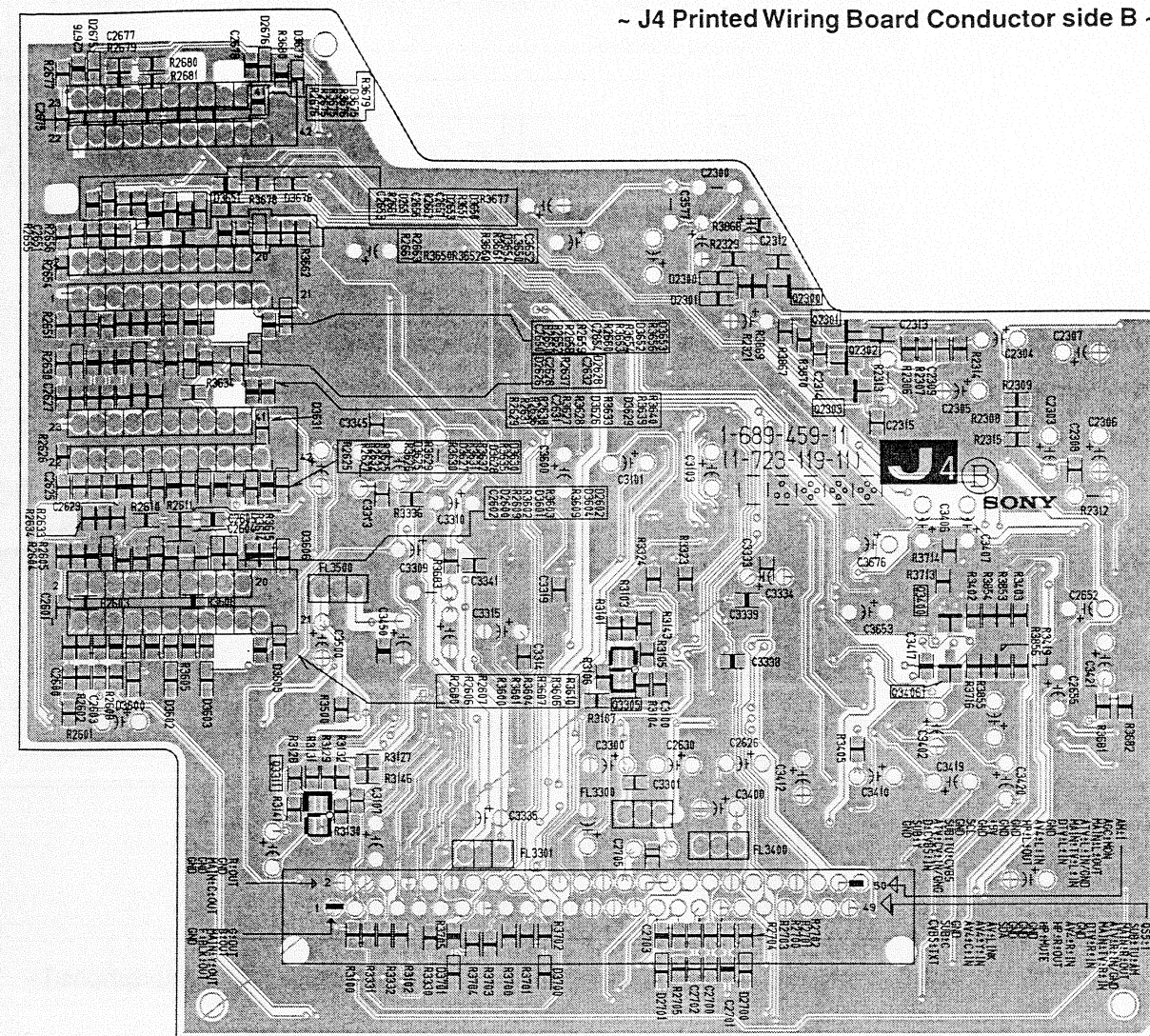




~ J4 Printed Wiring Board Conductor side A ~



~ J4 Printed Wiring Board Conductor side B ~



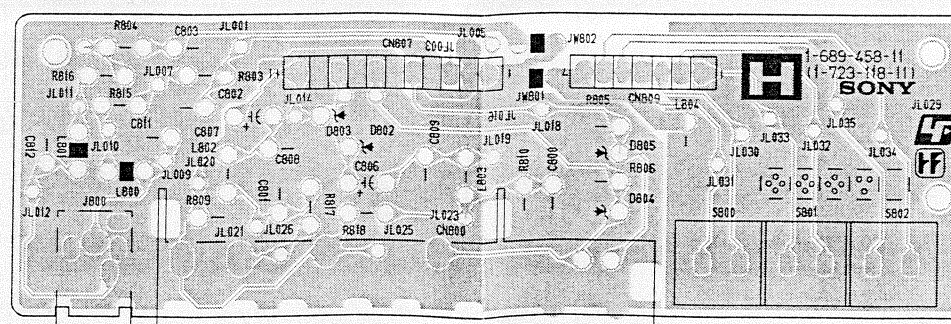
~ J4 Board Location Table A side ~

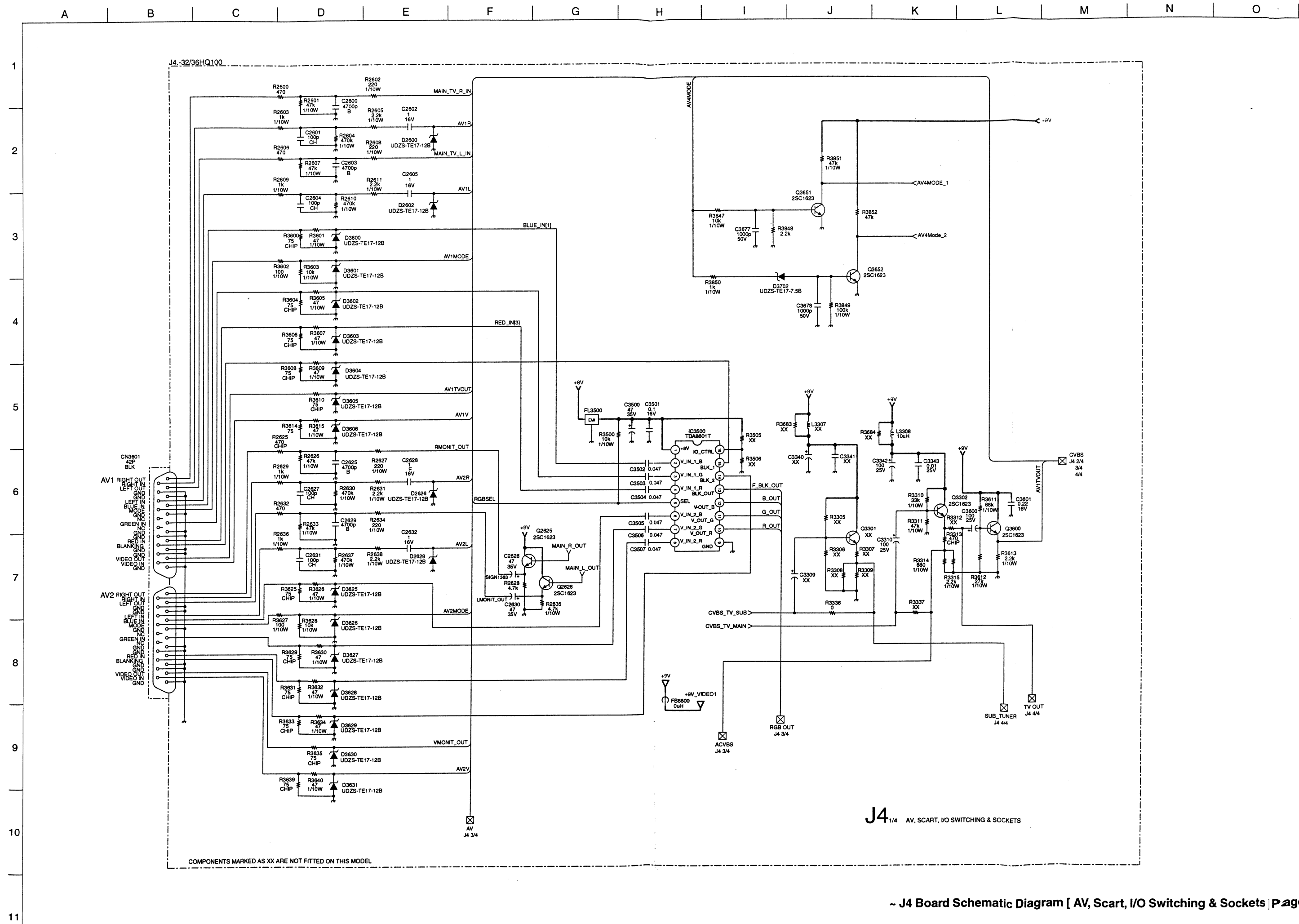
DIODE	IC	IC3500 E - 5	Q3300 D - 5	Q3310 E - 6	Q3403 C - 4	Q3410 E - 4	Q3651 F - 2
D2650 B - 4	IC2300 B - 3	TRANSISTORS	Q3302 F - 4	Q3312 F - 5	Q3404 C - 5	Q3600 E - 3	Q3652 F - 2
D2652 B - 4	IC3300 C - 4		Q3303 A - 5	Q3401 C - 4	Q3405 C - 5	Q3625 A - 5	Q8824 D - 2
D3702 G - 2	IC3400 B - 4		Q3306 C - 4	Q3402 C - 5	Q3407 A - 5	Q3650 D - 5	

~ J4 Board Location Table B side ~

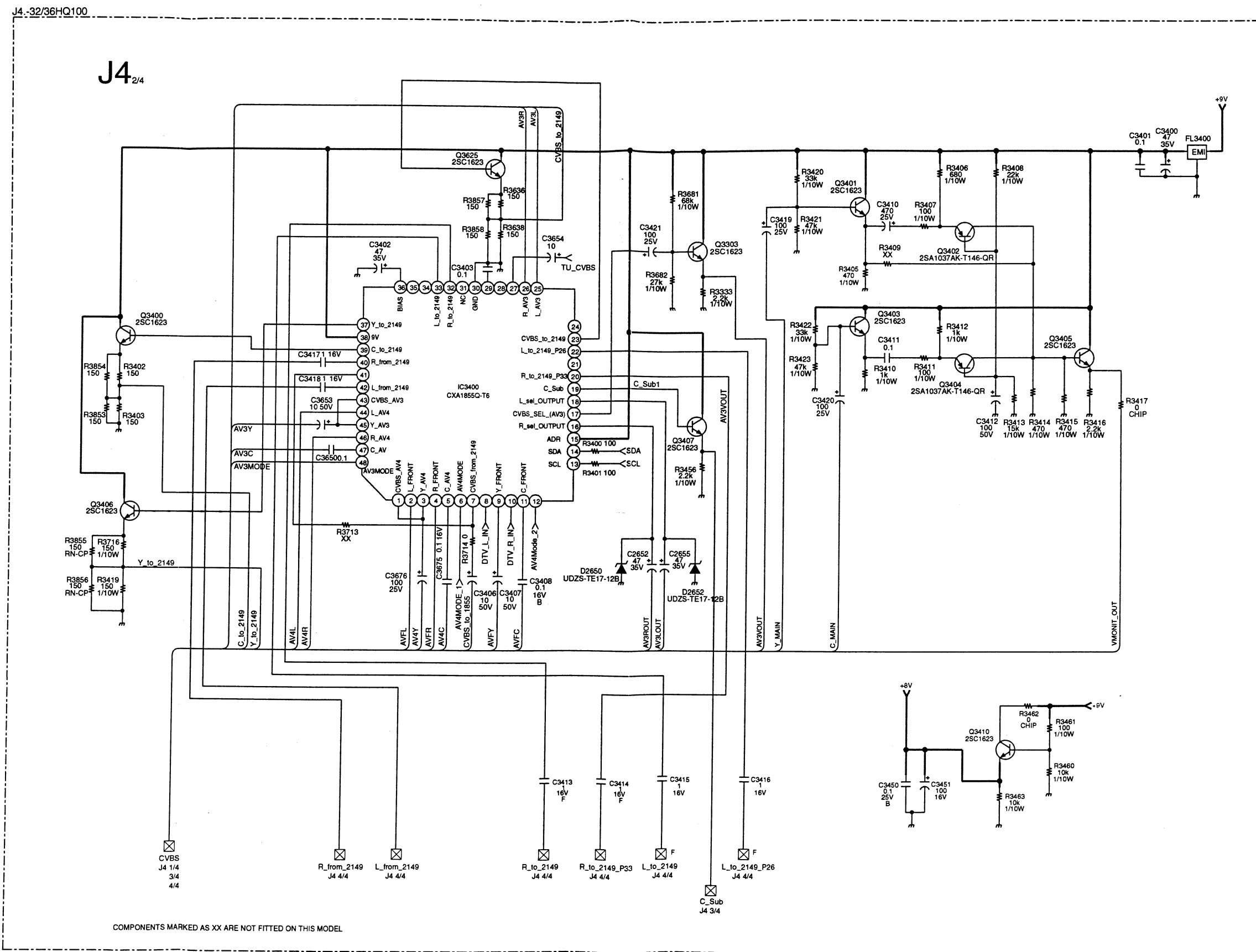
DIODE	D2675 I - 1	D3603 I - 5	D3627 K - 3	D3652 K - 3	D3700 K - 6	Q2303 M - 3
D2300 L - 2	D2676 I - 1	D3604 K - 4	D3628 K - 3	D3653 J - 2	D3701 J - 6	Q3305 K - 5
D2600 K - 4	D2700 L - 6	D3605 I - 5	D3630 K - 3	D3654 K - 2	TRANSISTOR	Q3311 I - 5
D2602 K - 4	D2701 L - 6	D3606 J - 4	D3631 J - 3	D3675 J - 2		Q3400 M - 4
D2626 K - 3	D3601 K - 4	D3625 J - 3	D3650 K - 2	D3676 J - 2		Q3406 M - 5
D2651 J - 2	D3602 I - 5	D3626 K - 3	D3651 I - 2	D3677 J - 1	Q2302 M - 3	

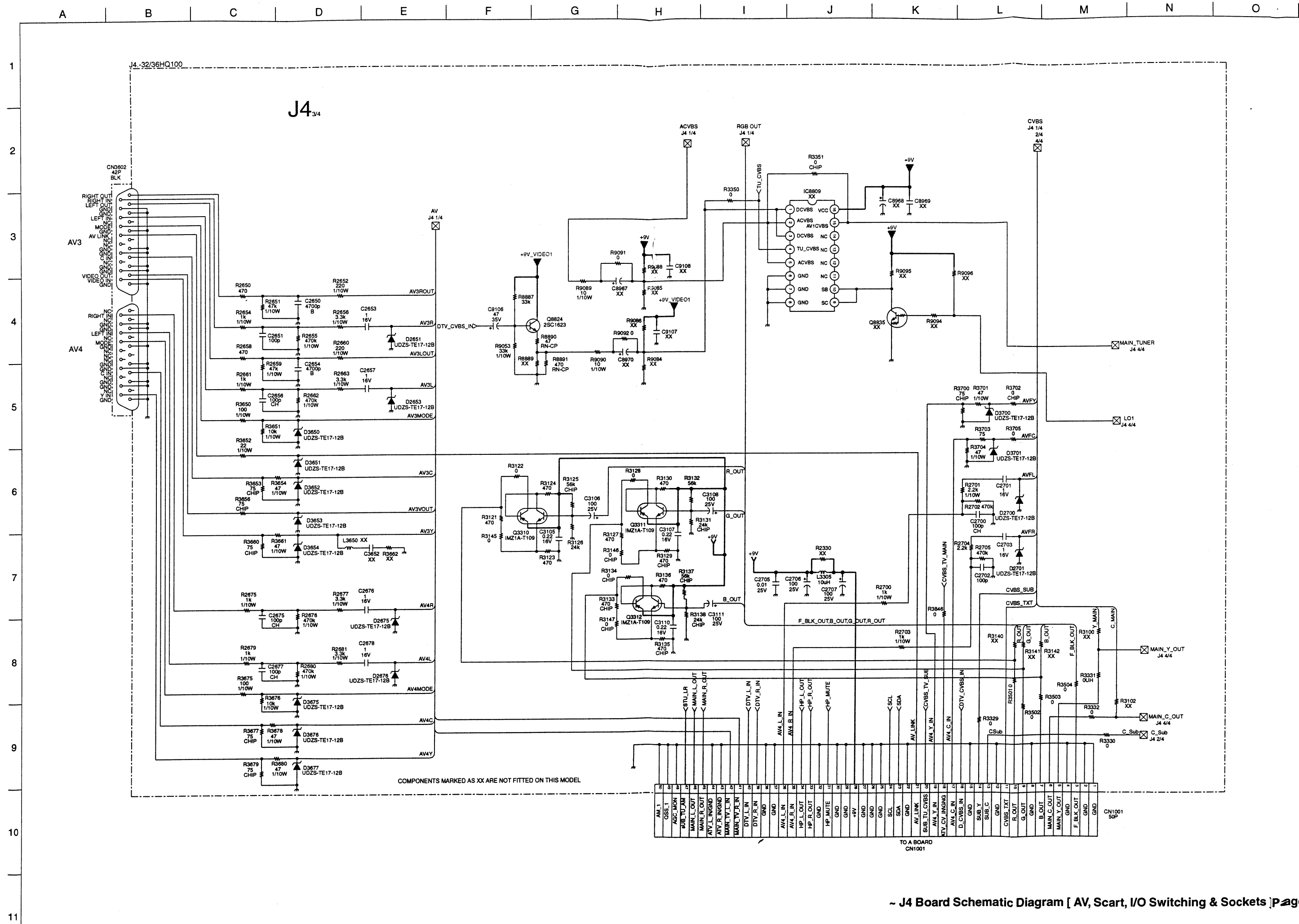
~ H Printed Wiring Board Conductor side ~

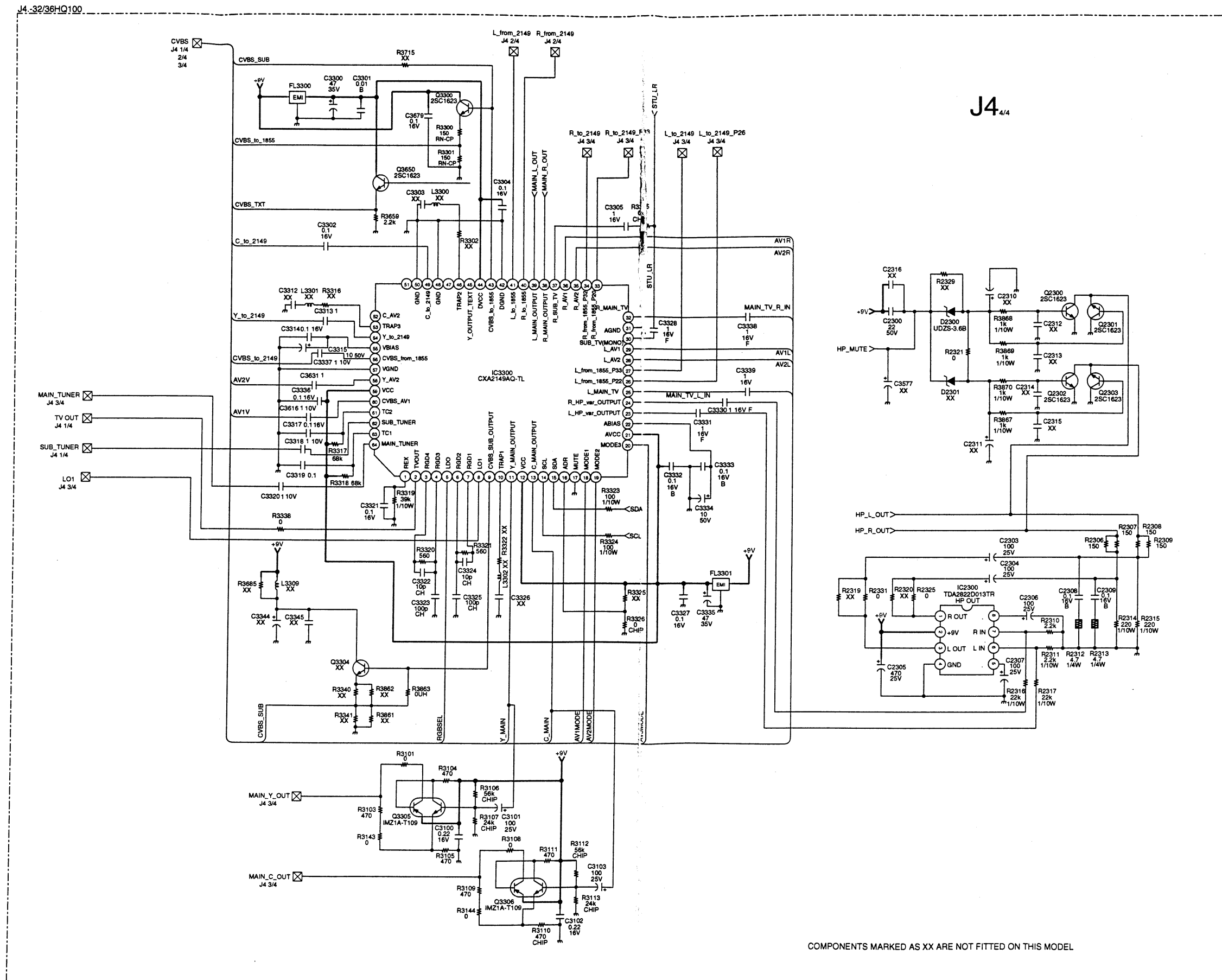




A B C D E F G H I J K L M N O



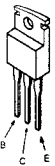




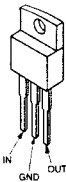
COMPONENTS MARKED AS XX ARE NOT FITTED ON THIS MODEL

5-4. SEMICONDUCTORS

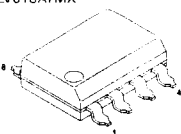
BA033T



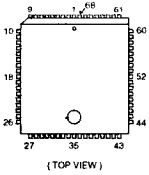
BA05T



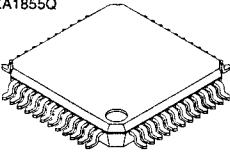
DS90LV017ATMX
DS90LV018ATMX



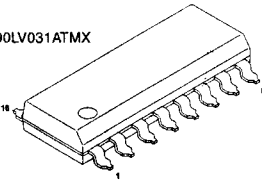
MSP3411G-QA-B11



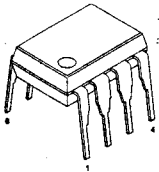
CXA1855Q



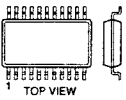
DS90LV031ATMX



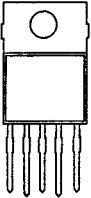
NJM082M



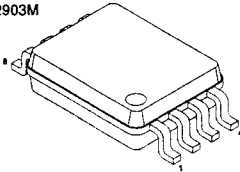
CXA1875AM-T4
LM358D
NJM3403AM
TDA2822D013TR



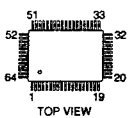
LA6500-FA



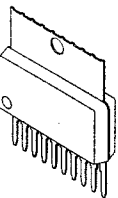
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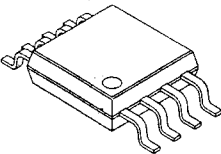
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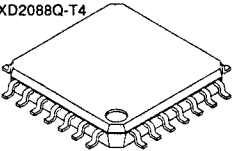
LA6510



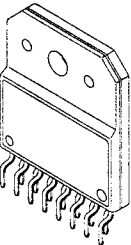
NJM2904M



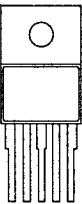
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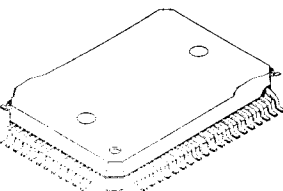
LM1876TF



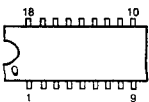
PQ1CG2032FZ



CXD9761Q



MCZ3001D
MCZ3001DA

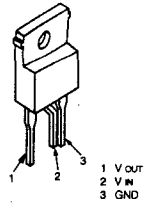


SBX3081-51(30)

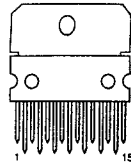


5-5 IC BLOCK DIAGRAMS

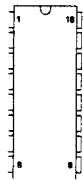
SE135N-LF4



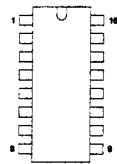
TDA7482



SN65LVDS32DR



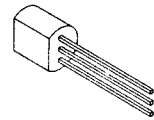
TDA8601T



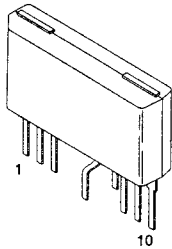
SN74CBTLV1G125DCKR



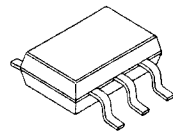
TL1431CZ-AP



STR-L474-LF429



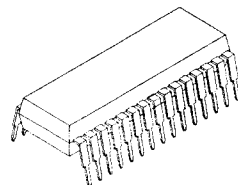
TLV431AIDBV



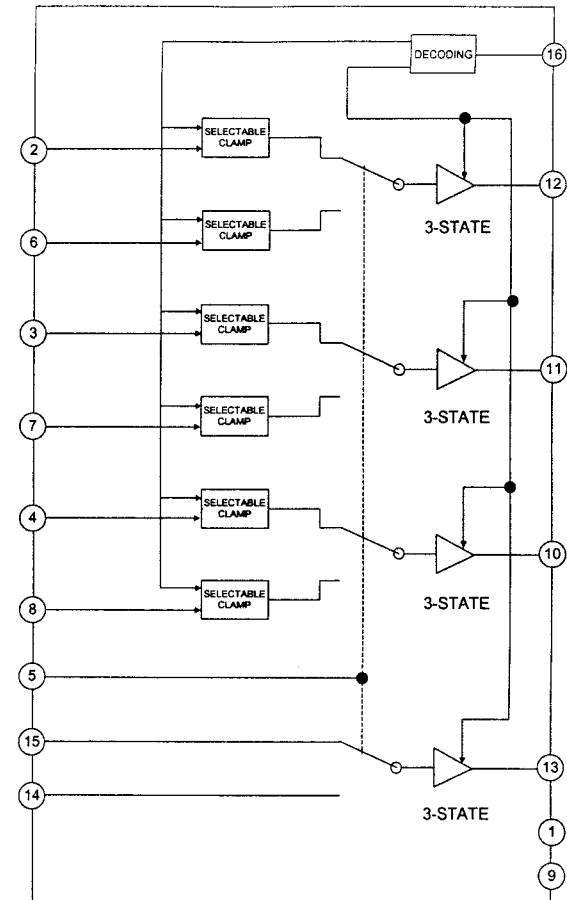
TDA6120Q/N2/S1



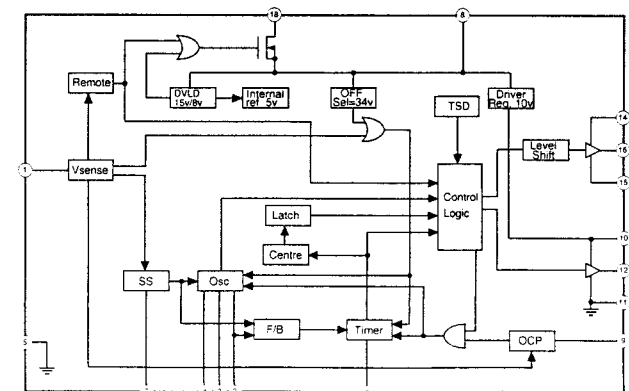
UPC1898CT-A



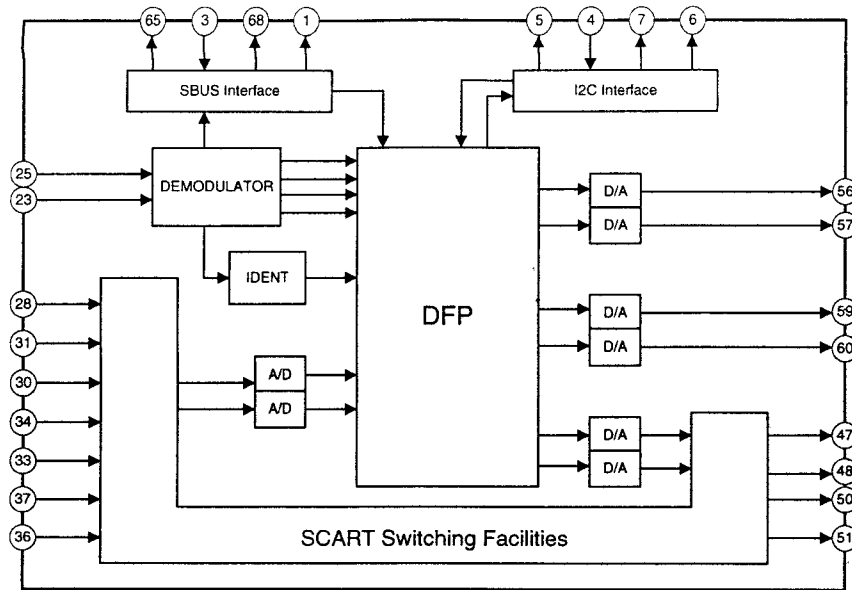
J4 BOARD IC3500 TDA8601T



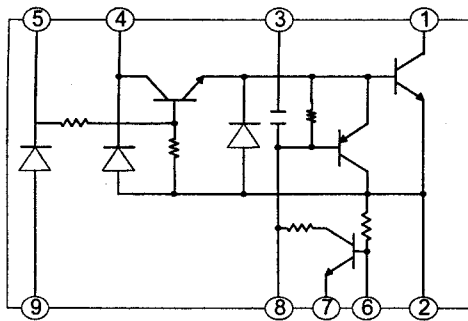
G BOARD IC6001 MCZ3001D
D2 BOARD IC6800 MCZ3001D



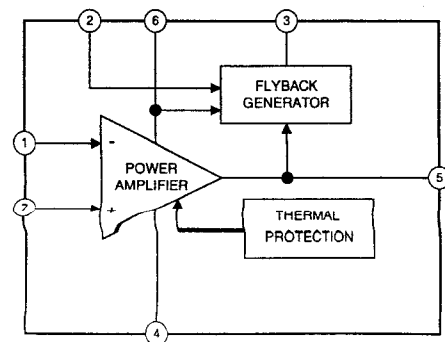
A BOARD IC2000 MSP3411G



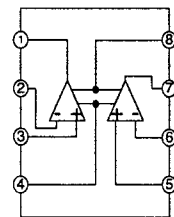
G BOARD IC6003 SE135N-LF4



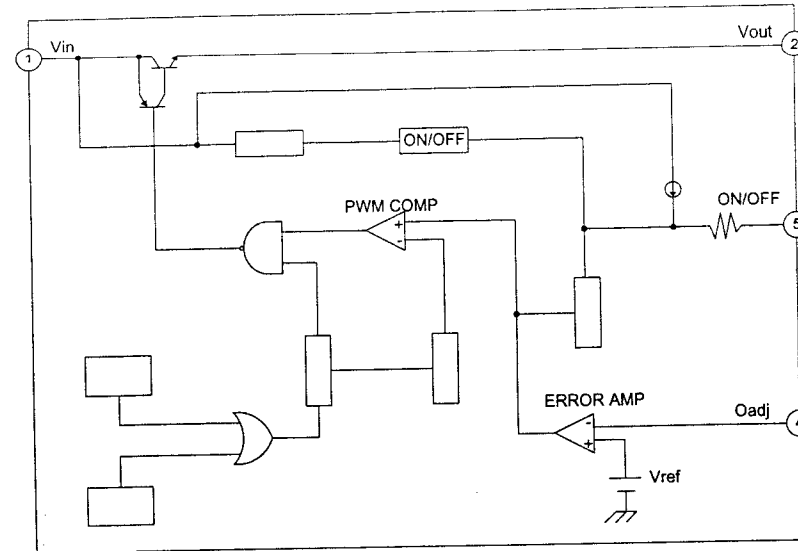
A BOARD IC5400 STV9379



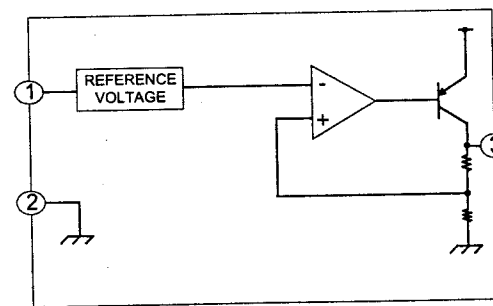
D1 BOARD IC8501 LM358



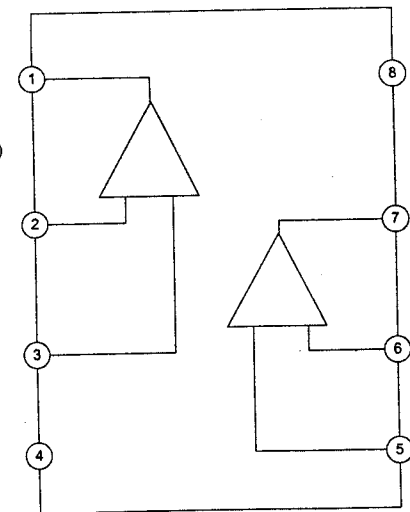
A BOARD IC6211/IC6212/IC6213 PQ1CG2032FZ



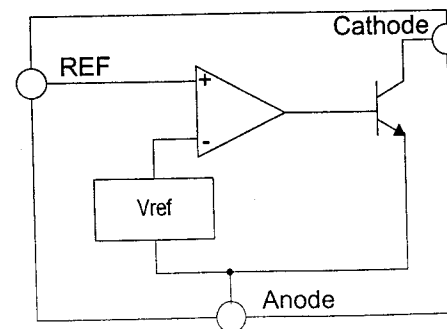
A BOARD IC6203/IC5600 BA033T/BA12T
SF BOARD IC5503 BA033T



D2 BOARD IC6801/IC6802 NJM2903/NJM2904



D2 BOARD IC6803/IC6807 TLV431



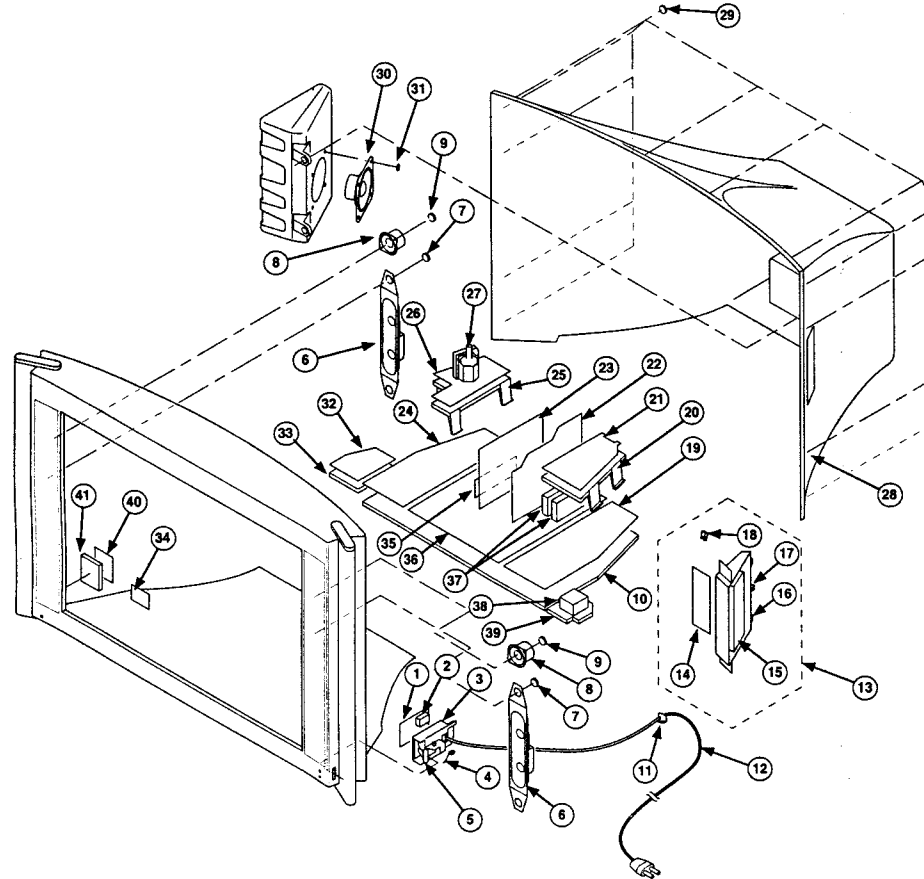
SECTION 6 EXPLODED VIEWS

NOTE :

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remarks column.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

6-1. CHASSIS



Note : Les composants identifiés par une trame et par une marque Δ sont d'une importance critique pour la sécurité. Ne les remplacer que par des pièces du numéro spécifié.

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

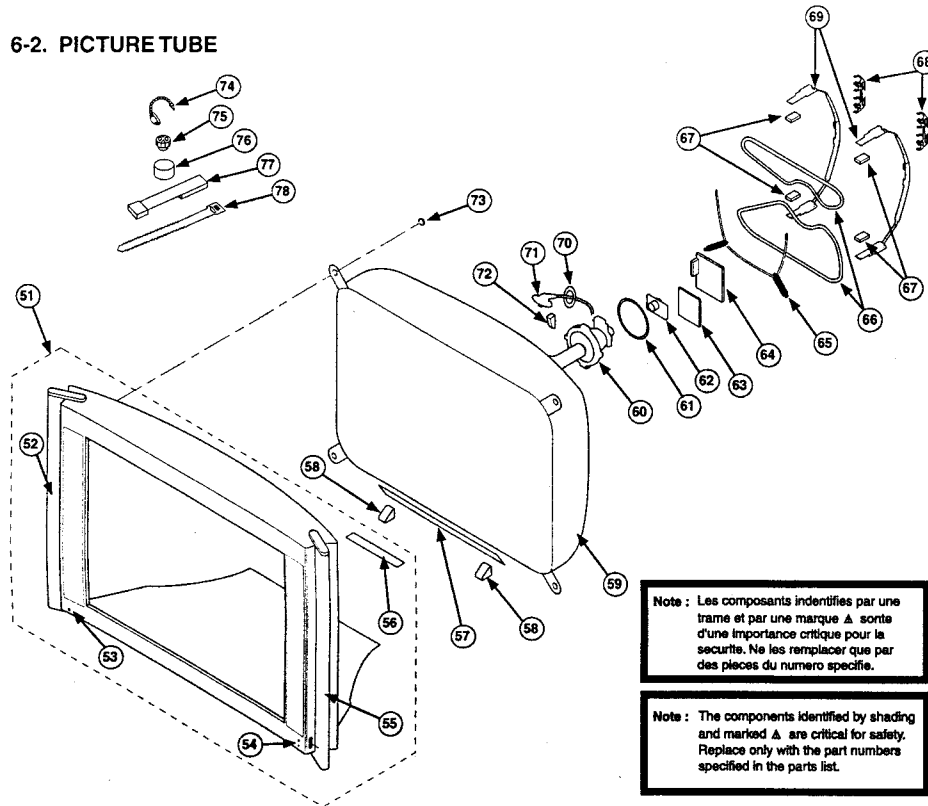
REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
1	*A-1405-851-A	F BOARD, COMPLETE	(KV-32HQ100B/E/K)	13	A-1604-541-A	DOOR COMPL. ASSY	(14-18)
2	*A-1405-512-A	F BOARD, COMPLETE	(KV-36HQ100B/E/K)	14	*A-1405-514-A	H BOARD, COMPLETE	
Δ 3	1-571-433-21	SWITCH, PUSH (AC POWER)		15	4-095-031-01	DOOR	
4	*4-095-033-01	F BRACKET		16	4-205-743-11	SPRING, TORSION	
5	*4-095-037-01	SPRING BUTTON POWER		17	4-047-464-01	CATCHER, PUSH	
6	*4-095-026-01	BUTTON, POWER		18	4-205-682-01	DAMPER	
7	1-825-177-11	LOUDSPEAKER (4.2X24CM)		19	*A-1405-704-A	G BOARD, COMPLETE	(KV-32HQ100B/E/K)
8	7-685-663-71	SCREW, + BVTP 4X16 TYPE2 IT-3		Δ 20	*A-1405-703-A	G BOARD, COMPLETE	(KV-36HQ100B/E/K)
9	1-542-437-11	SPEAKER (2CM)		21	4-206-383-11	BRACKET, G1	
Δ 10	7-685-661-14	SCREW, + BVTP 4X12 TYPE2 IT-3		22	*A-1405-505-A	G1 BOARD, COMPLETE	
11	*4-206-106-26	BRACKET, MAIN		23	*A-1405-503-A	J4 BOARD, COMPLETE	
12	*4-202-531-01	AC CORD LOCK (SC)			*A-1405-504-A	N BOARD, COMPLETE	
Δ 13	1-823-853-11	CORD, POWER					

CONTINUED....

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
24	*A-1405-539-A	D1 BOARD, COMPLETE	(KV-32HQ100B/E/K)	33	*4-395-036-01	SF BRACKET	
25	*A-1405-507-A	D1 BOARD, COMPLETE	(KV-36HQ100B/E/K)	34	*A-1410-666-A	SF2 BOARD, COMPLETE	
26	*4-087-469-02	BRACKET, D2		35	*A-1405-501-A	B BOARD, COMPLETE	
27	*A-1405-540-A	D2 BOARD, COMPLETE	(KV-32HQ100B/E/K)	36	*A-1302-431-A	A BOARD, COMPLETE	(KV-32HQ100B)
Δ 28	*A-1405-509-A	D2 BOARD, COMPLETE	(KV-36HQ100B/E/K)		*A-1302-304-A	A BOARD, COMPLETE	(KV-32HQ100B/K)
29	1-453-444-21	TRANSFORMER ASSY. FLYBACK (MX-6020//E2B4)			*A-1302-418-A	A BOARD, COMPLETE	(KV-36HQ100B)
30	4-095-048-01	COVER, REAR	(KV-32HQ100B/E/K)		*A-1302-293-A	A BOARD, COMPLETE	(KV-36HQ100B/K)
31	4-095-019-01	COVER, REAR	(KV-36HQ100B/E/K)	37	8-598-536-20	FRONT END BTF-EF412	(KV-32/36HQ100B)
32	7-685-663-79	SCREW +BVTP 4X16 TYPE2 IT-3			8-598-534-10	FRONT END BTF-EC412	(KV-32/36HQ100B/X)
	1-825-213-21	LOUDSPEAKER (10CM)		38	1-424-855-11	COIL, CHOKE 29MMH	
	4-058-870-01	SCREW, (4X16) W(+)P TAPPING		39	4-206-384-11	BRACKET, PFC	
	*A-1410-377-A	SF BOARD, COMPLETE	(KV-32HQ100B/E/K)	40	*A-1405-513-A	MS3 BOARD, COMPLETE	
	*A-1405-506-A	SF BOARD, COMPLETE	(KV-36HQ100B/E/K)	41	*4-095-032-01	NS BRACKET	

SECTION 7 ELECTRICAL PARTS LIST

6-2. PICTURE TUBE



REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
51	X-4041-553-1	BEZEL ASSEMBLY	52-56 (KV-32HQ100B/E/K)	64	*A-1405-502-A	C2 BOARD, COMPLETE	
	X-4041-552-1	BEZEL ASSEMBLY	52-56 (KV-36HQ100B/E/K)	65	4-369-318-21	SPRING, TENSION	(KV-32HQ100B/E/K)
52	X-4041-879-1	FRONT LEG LEFT ASSY	(KV-32HQ100B/E/K)		4-089-228-01	SPRING EXTENSION	(KV-36HQ100B/E/K)
	X-4041-874-1	FRONT LEG LEFT ASSY	(KV-36HQ100B/E/K)				
53	*4-095-027-01	GUIDE LIGHT LEFT					
54	*4-095-028-01	GUIDE LIGHT RIGHT					
55	X-4041-879-1	FRONT LEG RIGHT ASSY	(KV-32HQ100B/E/K)	67	4-098-510-11	DGC, CUSHION	(KV-32HQ100B/E/K)
	X-4041-873-1	FRONT LEG RIGHT ASSY	(KV-36HQ100B/E/K)		4-098-501-11	DGC, CUSHION	(KV-36HQ100B/E/K)
56	4-204-865-01	SHEET, BLOTTING	(KV-32HQ100B/E/K)	68	4-089-227-02	DGC CLIP	(KV-36HQ100B/E/K)
	4-204-865-21	SHEET, BLOTTING	(KV-36HQ100B/E/K)	69	*4-204-768-02	HOLDER, DGC (29)"	(KV-32HQ100B/E/K)
57	4-204-66-01	SHEET, BLOTTING	(KV-32HQ100B/E/K)		4-064-945-05	HOLDER, DGC	(KV-36HQ100B/E/K)
	4-203-128-21	SHEET, BLOTTING	(KV-36HQ100B/E/K)	70	4-202-554-02	HOLDER, RV CABLE	
58	*4-203-098-01	SUPPORTER, CRT					
59	A-735-079-05	CRT W/LEAD WIRE	(KV-32HQ100B/E/K)				
	A-735-115-05	CRT W/LEAD WIRE	(KV-36HQ100B/E/K)	72	3-704-495-03	SPACER, DY	(KV-32HQ100B/E/K)
60	A-151-520-11	DI (Y32NWC)	(KV-32HQ100B/E/K)		4-096-665-01	SPACER, DY	(KV-36HQ100B/E/K)
	8-451-538-11	DY Y36DCCP-M	(KV-36HQ100B/E/K)	73	A-046-765-12	SCREW, TAPPING 7-CROWN WASHER	
61	1-452-896-11	COIL, NA ROTATION (RT200)		74	4-308-870-00	CLIP, LEAD WIRE	
62	8-453-022-21	NA2920-M2	(KV-32HQ100B/E/K)	75	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM	
	8-453-023-41	NA328M4	(KV-36HQ100B/E/K)	76	1-452-032-00	MAGNET, DISK; 10MM	
63	*A-1405-508-A	VM BOARD, COMPLETE		77	X-4387-214-1	PERMALLOY ASSY, CORRECTION	
				78	3-701-007-00	BAND, BINDING	

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Note : The N Board and B Board Schematic Diagrams, Printed Wiring Boards and Parts List are not indicated in this manual as the PWB's are regarded as non service items for exchange only.

Note : Refer to the designated variant parts list when seeking a part indicated by an asterisk (*)
Parts indicated (XX) on the Schematic Diagram are not used in this model and therefore do not appear in the Parts List.

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
* A-1302-431-A A Board, Complete KV-32HQ100B				C2011	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V	C2210	1-126-952-11	ELECT 1000UF	20.00% 35V	C5153	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
* A-1302-304-A A Board, Complete KV-32HQ100E				C2013	1-126-964-11	ELECT 10UF	20.00% 50V	C2211	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5154	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
* A-1302-304-A A Board, Complete KV-32HQ100K				C2014	1-126-964-11	ELECT 10UF	20.00% 50V	C2212	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5300	1-126-947-11	ELECT 47UF	20.00% 35V
* A-1302-418-A A Board, Complete KV-36HQ100B				C2015	1-126-947-11	ELECT 47UF	20.00% 35V	C2300	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C5303	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
* A-1302-293-A A Board, Complete KV-36HQ100E				C2016	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2301	1-126-947-11	ELECT 47UF	20.00% 35V	C5304	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V
* A-1302-293-A A Board, Complete KV-36HQ100K				C2017	1-126-947-11	ELECT 47UF	20.00% 35V	C2302	1-136-175-00	FILM 0.68UF	5.00% 50V	C5305	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
A Board, Common Parts				C2018	1-165-319-11	CERAMIC CHIP 0.1UF	50V	C2303	1-126-943-11	ELECT 2200UF	20.00% 25V	C5307	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V
	4-202-373-01	SPRING, IC		C2019	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2304	1-164-739-11	CERAMIC CHIP 560PF	5.00% 50V	C5309	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V
	4-206-065-01	SPACER INSULATING		C2020	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C2305	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	C5312	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V
	4-382-854-01	SCREW (M3X8), P, SW (+)		C2021	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2306	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C5313	1-126-947-11	ELECT 47UF	20.00% 35V
< CAPACITOR >				C2022	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2307	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C5315	1-126-947-11	ELECT 47UF	20.00% 35V
C300	1-126-947-11	ELECT 47UF	20.00% 35V	C2023	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2308	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C5316	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C301	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2024	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2309	1-164-505-11	CERAMIC CHIP 2.2UF	16V	C5319	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C302	1-162-921-11	CERAMIC CHIP 33PF	5.00% 50V	C2025	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V	C2310	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5322	1-129-718-00	FILM 0.022UF	5% 630V
C303	1-126-947-11	ELECT 47UF	20.00% 35V	C2026	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V	C2311	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5326	1-126-941-11	ELECT 470UF	20.00% 25V
C304	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C2027	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C2313	1-130-777-00	MYLAR 0.1UF	5.00% 100V	C5327	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C305	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2028	1-162-922-11	CERAMIC CHIP 39PF	5.00% 50V	C2314	1-111-216-91	ELECT 150UF	20.00% 63V	C5328	1-104-665-11	ELECT 100UF	20.00% 25V
C400	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2029	1-104-665-11	ELECT 100UF	20.00% 25V	C2315	1-164-222-91	CERAMIC CHIP 0.22UF	25V	C5331	1-137-194-81	FILM 0.47UF	5.00% 50V
C401	1-126-964-11	ELECT 10UF	20.00% 50V	C2030	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V	C2316	1-162-961-11	ELECT 2.2UF	20.00% 50V	C5332	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C1006	1-126-960-11	ELECT 1UF	20.00% 50V	C2031	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C2317	1-126-944-11	ELECT 3300UF	20.00% 25V	C5334	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C1008	1-126-957-11	ELECT 0.22UF	20.00% 50V	C2032	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C2318	1-126-944-11	ELECT 3300UF	20.00% 25V	C5335	1-126-947-11	ELECT 47UF	20.00% 35V
C1012	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2035	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C2400	1-126-935-11	ELECT 470UF	20.00% 16V	C5400	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C1101	1-126-934-11	ELECT 220UF	20.00% 16V	C2036	1-126-964-11	ELECT 10UF	20.00% 50V	C2450	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	C5401	1-126-940-11	ELECT 330UF	20.00% 25V
C1103	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C2037	1-126-947-11	ELECT 47UF	20.00% 35V	C2451	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V	C5402	1-102-228-00	CERAMIC CHIP 470PF	10.00% 500V
C1105	1-104-665-11	ELECT 100UF	20.00% 25V	C2038	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C2453	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C5403	1-163-017-00	CERAMIC CHIP 0.0047UF	10.00% 50V
C1106	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C2039	1-164-505-11	CERAMIC CHIP 2.2UF	16V	C2454	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C5404	1-129-702-00	MYLAR 0.001UF	10.00% 400V
C1107	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C2040	1-126-947-11	ELECT 47UF	20.00% 35V	C2455	1-126-965-91	ELECT 22UF	20% 50V	C5405	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C1108	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2041	1-126-947-11	ELECT 47UF	20.00% 35V	C4100	1-162-974-11	CERAMIC CHIP 0.01UF	50V	C5406	1-126-968-11	ELECT 100UF	20.00% 50V
C1109	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2042	1-126-947-11	ELECT 47UF	20.00% 35V	C4101	1-126-964-11	ELECT 10UF	20.00% 50V	C5407	1-137-401-11	MYLAR 0.22UF	5.00% 100V
C1200	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C2043	1-126-947-11	ELECT 47UF	20.00% 35V	C4115	1-107-826-91	CERAMIC CHIP 0.1UF	10% 16V	C5408	1-106-220-00	MYLAR 0.1UF	10.00% 100V
C1201	1-126-934-11	ELECT 220UF	20.00% 16V	C2044	1-164-505-11	CERAMIC CHIP 2.2UF	16V	C4116	1-162-970-91	CERAMIC CHIP 0.1UF	10% 25V	C5409	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C1203	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C2045	1-164-505-11	CERAMIC CHIP 2.2UF	16V	C4119	1-107-826-91	CERAMIC CHIP 0.1UF	10% 16V	C5410	1-126-968-11	ELECT 100UF	20.00% 50V
C1301	1-126-933-11	ELECT 100UF	20.00% 16V	C2046	1-164-505-11	CERAMIC CHIP 2.2UF	16V	C4120	1-107-826-91	CERAMIC CHIP 0.1UF	10% 16V	C5411	1-130-785-11	MYLAR 0.47UF	5.00% 100V
C1302	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C2047	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C4121	1-162-970-91	CERAMIC CHIP 0.1UF	10% 25V	C5412	1-126-964-11	ELECT 10UF	20.00% 50V
C1418	1-126-916-11	ELECT 1000UF	20.00% 6.3V	C2048	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C4122	1-162-970-91	CERAMIC CHIP 0.1UF	10% 25V	C5413	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C1602	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2049	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C5000	1-126-964-11	ELECT 10UF	20.00% 50V	C5600	1-126-947-11	ELECT 47UF	20.00% 35V
C1603	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2050	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C5001	1-126-964-11	ELECT 10UF	20.00% 50V	C5601	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C1604	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C2051	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C5002	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C5602	1-126-941-11	ELECT 470UF	20.00% 25V
C1606	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C2052	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C5003	1-126-964-11	ELECT 10UF	20.00% 50V	C5603	1-104-665-11	ELECT 100UF	20.00% 25V
C1607	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C2053	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V	C5004	1-126-964-11	ELECT 10UF	20.00% 50V	C5604	1-104-665-11	ELECT 100UF	20.00% 25V
C1609	1-126-964-11	ELECT 10UF	20.00% 50V	C2200	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5005	1-126-964-11	ELECT 10UF	20.00% 50V	C5605	1-126-947-11	ELECT 47UF	20.00% 35V
C2000	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2201	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5006	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C5800	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2001	1-126-947-11	ELECT 47UF	20.00% 35V	C2202	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5100	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C5802	1-126-964-11	ELECT 10UF	20.00% 50V
C2002	1-164-346-11	CERAMIC CHIP 1UF	16V	C2203	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5101	1-126-947-11	ELECT 47UF	20.00% 35V	C5803	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C2003	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C2204	1-126-965-91	ELECT 22UF	20.00% 50V	C5102	1-136-497-81	FILM 0.1UF	5.00% 50V	C5804	1-136-497-81	FILM 0.1UF	5.00% 50V
C2004	1-164-346-11	CERAMIC CHIP 1UF	16V	C2205	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	C5103	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C5805	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V
C2005	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C2206	1-126-965-91	ELECT 22UF	20.00% 50V	C5104	1-126-947-11	ELECT 47UF	20.00% 35V	C5806	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C2006	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	C2207	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	C5105	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C5807	1-104-665-11	ELECT 100UF	20.00% 25V
C2009	1-162-909-11	CERAMIC CHIP 4PF	0.25PF 50V	C2208	1-126-952-11	ELECT 1000UF	20.00% 35V	C5151	1-136-497-81	FILM 0.1UF	5.00% 50V	C5808	1-126-933-11	ELECT 100UF	20.00% 16V
				C2209	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C5152	1-136-497-81	FILM 0.1UF	5.00% 50V	C5809	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V

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REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
C5810	1-126-963-11	ELECT 4.7UF	20.00% 50V	C6248	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V
C5811	1-126-963-11	ELECT 4.7UF	20.00% 50V	C7000	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5814	1-162-966-11	CERAMIC CHIP 0.0022UF	10.00% 50V	C7001	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5815	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C7002	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5816	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C7003	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5817	1-126-947-11	ELECT 47UF	20.00% 35V	C7004	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5819	1-162-962-11	CERAMIC CHIP 470PF	10.00% 50V	C7005	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C6200	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7006	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V
C6201	1-126-925-11	ELECT 470UF	20.00% 10V	C7007	1-126-947-11	ELECT 47UF	20.00% 35V
C6202	1-126-925-11	ELECT 470UF	20.00% 10V	C7008	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6205	1-137-375-11	MYLAR 0.068UF	5.00% 50V	C7010	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6206	1-137-375-11	MYLAR 0.068UF	5.00% 50V	C7011	1-126-963-11	ELECT 4.7UF	20.00% 50V
C6207	1-128-526-11	ELECT 100UF	20.00% 25V	C7012	1-104-665-11	ELECT 100UF	20.00% 25V
C6209	1-126-916-11	ELECT 1000UF	20.00% 6.3V	C7013	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6210	1-126-916-11	ELECT 1000UF	20.00% 6.3V	C7014	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C6211	1-107-869-11	ELECT 470UF	20.00% 6.3V	C7015	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C6212	1-107-869-11	ELECT 470UF	20.00% 6.3V	C7016	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C6213	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7017	1-104-665-11	ELECT 100UF	20.00% 25V
C6214	1-126-964-11	ELECT 10UF	20.00% 50V	C7018	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6215	1-107-906-11	ELECT 10UF	20.00% 50V	C7019	1-115-416-11	CERAMIC CHIP 0.001UF	5.00% 25V
C6216	1-104-665-11	ELECT 100UF	20.00% 25V	C7020	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V
C6217	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7021	1-125-891-11	CERAMIC CHIP 0.47UF	10.00% 10V
C6218	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7022	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V
C6219	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7023	1-126-947-11	ELECT 47UF	20.00% 35V
C6220	1-104-665-11	ELECT 100UF	20.00% 25V	C7024	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6221	1-128-526-11	ELECT 100UF	20.00% 25V	C7025	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C6222	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7026	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C6223	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	C7027	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C6224	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C8002	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C6225	1-164-156-11	CERAMIC CHIP 0.1UF	25V	C8003	1-110-489-11	CAPACITOR 1F	5.5V
C6226	1-104-665-11	ELECT 100UF	20.00% 25V	C8004	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V
C6228	1-126-947-11	ELECT 47UF	20.00% 35V	C8005	1-164-160-11	CERAMIC CHIP 20PF	5.00% 50V
C6229	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V				
C6230	1-126-947-11	ELECT 47UF	20.00% 35V				
C6231	1-126-916-11	ELECT 1000UF	20.00% 6.3V				
C6232	1-107-906-11	ELECT 10UF	20.00% 50V				
C6233	1-128-526-11	ELECT 100UF	20.00% 25V				
C6234	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V				
C6235	1-126-955-11	ELECT 470UF	20.00% 10V				
C6237	1-137-375-11	MYLAR 0.068UF	5.00% 50V				
C6238	1-126-916-11	ELECT 1000UF	20.00% 6.3V				
C6239	1-107-869-11	ELECT 470UF	20.00% 6.3V				
C6240	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V				
C6241	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V				
C6242	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V				
C6243	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V				
C6244	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V				
C6245	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V				
C6246	1-164-156-11	CERAMIC CHIP 0.1UF	25V				
C6247	1-162-974-11	CERAMIC CHIP 0.01UF	50V				

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REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
CN1091	1-695-915-11	TAB (CONTACT)		D2301	8-719-914-44	DIODE DAP202K	
CN1092	1-695-915-11	TAB (CONTACT)		D2302	8-719-914-44	DIODE DAP202K	
CN1093	1-695-915-11	TAB (CONTACT)		D2303	8-719-914-43	DIODE DAN202K	
CN1094	1-695-915-11	TAB (CONTACT)		D2304	8-719-914-44	DIODE DAP202K	
CN1601	* 1-816-124-11	PIN, CONNECTOR (FOR PWB) 18P		D2305	8-719-988-61	DIODE 1SS355TE-17	
CN1999	* 1-564-520-11	PLUG, CONNECTOR 5P		D2400	8-719-929-15	DIODE HZS9.1NB2	
CN5001	* 1-564-511-11	PLUG, CONNECTOR 8P		D2403	8-719-929-15	DIODE HZS9.1NB2	
CN5002	* 1-564-510-11	PLUG, CONNECTOR 7P		D4100	8-719-982-24	DIODE MTJZ-33A	
CN5003	* 1-564-511-11	PLUG, CONNECTOR 8P		D5301	8-719-988-61	DIODE 1SS355TE-17	
CN5004	1-764-333-11	PIN, CONNECTOR(PCB) (V TYPE)10P		D5303	8-719-987-87	DIODE ERAS5-009	
CN5005	* 1-564-509-11	PLUG, CONNECTOR 6P		D5304	8-719-991-33	DIODE 1SS133T-77	
CN5006	* 1-564-515-11	PLUG, CONNECTOR 12P		D5305	8-719-052-90	DIODE DINL40-TA2	
CN5007	* 1-564-506-61	PLUG, CONNECTOR 3P		D5307	8-719-081-97	DIODE MMDL914T1	
CN5008	* 1-564-510-11	PLUG, CONNECTOR 7P		D5308	8-719-081-97	DIODE MMDL914T1	
CN5009	* 1-691-772-11	PLUG (MICRO CONNECTOR) 10P		D5400	8-719-110-49	DIODE RD18SEB2	
CN5012	1-695-915-11	TAB (CONTACT)		D5401	8-719-908-03	DIODE GP08D	
CN5013	* 1-564-506-11	PLUG, CONNECTOR 3P		D5402	8-719-110-41	DIODE RD15SEB2	
		< SPLITTER >		D5403	8-719-074-43	DIODE BAS316-115	
CP1301	1-251-658-11	SPLITTER RF		D5404	8-719-074-43	DIODE BAS316-115	
		< DIODE >		D5800	8-719-066-11	DIODE 1PS184-115	
D300	8-719-083-60	DIODE UDZSTE-174.7B		D5801	8-719-069-60	DIODE UDZSTE-179.1B	
D301	8-719-978-33	DIODE D7T-TT11-6.8B		D6200	8-719-500-70	DIODE D5S4W	
D302	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D6201	8-719-500-70	DIODE D5S4W	
D303	8-719-914-43	DIODE DAN202K		D6202	8-719-063-70	DIODE DINL200	
D304	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D6203	8-719-069-55	DIODE UDZSTE-175.6B	
D305	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D6204	8-719-063-70	DIODE DINL200	
D306	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D6206	8-719-500-70	DIODE D5S4W	
D309	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D6215	8-719-982-24	DIODE MTJZ-33A	
D310	1-115-339-11	CERAMIC CHIP 0.1UF	10.00% 50V	D7000	8-719-066-11	DIODE 1PS184-115	
D400	8-719-914-43	DIODE DAN202K		D7001	8-719-066-11	DIODE 1PS184-115	
D401	8-719-914-43	DIODE DAN202K		D7002	8-719-083-60	DIODE UDZSTE-174.7B	
D1001	8-719-914-44	DIODE DAP202K		D7010	8-719-988-61	DIODE 1SS355TE-17	
D1002	8-719-069-55	DIODE UDZSTE-175.6B		D7015	8-719-988-62	DIODE 1SS355TE-18	
D1003	8-719-914-43	DIODE DAN202K		D8001	8-719-914-43	DIODE DAN202K	
D1004	8-719-069-55	DIODE UDZSTE-175.6B					
D1005	8-719-914-44	DIODE DAP202K					
D1008	8-719-069-55	DIODE UDZSTE-175.6B					
D1100	8-719-069-54	DIODE UDZSTE-175.1B					
D1607	8-719-914-42	DIODE DA204K					
D2000	8-719-083-82	DIODE UDZS-TE17-12B					
D2001	8-719-083-82	DIODE UDZS-TE17-12B					
D2002	8-719-083-82	DIODE UDZS-TE17-12B					
D2003	8-719-083-82	DIODE UDZS-TE17-12B					
D2004	8-719-110-09	DIODE RD8.2ESB3					
D2200	8-719-083-60	DIODE UDZSTE-174.7B					
D2201	8-719-988-61	DIODE 1SS355TE-17					
D2300	8-719-914-43	DIODE DAN202K					

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REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R1021	1-216-826-11	METAL CHIP	2.7K 5% 1/10W	R1424	1-216-864-11	SHORT CHIP	0
R1026	1-216-864-11	SHORT CHIP	0	R1425	1-216-864-11	SHORT CHIP	0
R1029	1-216-864-11	SHORT CHIP	0	R1426	1-216-864-11	SHORT CHIP	0
R1030	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1427	1-216-864-11	SHORT CHIP	0
R1031	1-216-295-91	SHORT CHIP	0	R1428	1-216-864-11	SHORT CHIP	0
R1032	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1476	1-216-864-11	SHORT CHIP	0
R1033	1-216-295-91	SHORT CHIP	0	R1477	1-216-864-11	SHORT CHIP	0
R1035	1-216-821-11	METAL CHIP	1K 5% 1/10W	R1603	1-216-864-11	SHORT CHIP	0
R1036	1-216-833-11	METAL CHIP	10K 5% 1/10W	R1604	1-216-864-11	SHORT CHIP	0
R1037	1-216-864-11	SHORT CHIP	0	R1605	1-216-864-11	SHORT CHIP	0
R1038	1-216-864-11	SHORT CHIP	0	R1606	1-216-864-11	SHORT CHIP	0
R1040	1-216-821-11	METAL CHIP	1K 5% 1/10W	R1607	1-216-809-11	METAL CHIP	100 5% 1/10W
R1041	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R1608	1-216-864-11	SHORT CHIP	0
R1044	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R2000	1-216-837-11	METAL CHIP	22K 5% 1/10W
R1045	1-216-835-11	METAL CHIP	15K 5% 1/10W	R2004	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1046	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R2005	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1047	1-216-821-11	METAL CHIP	1K 5% 1/10W	R2006	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1048	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R2007	1-249-401-11	CARBON	47 5% 1/4W
R1049	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R2011	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1102	1-216-833-11	METAL CHIP	10K 5% 1/10W	R2012	1-216-809-11	METAL CHIP	100 5% 1/10W
R1103	1-216-809-11	METAL CHIP	100 5% 1/10W	R2013	1-216-809-11	METAL CHIP	100 5% 1/10W
R1105	1-216-817-11	METAL CHIP	470 5% 1/10W	R2014	1-216-815-11	METAL CHIP	330 5% 1/10W
R1106	1-216-834-11	METAL CHIP	12K 5% 1/10W	R2016	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1107	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W	R2017	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R1108	1-216-809-11	METAL CHIP	100 5% 1/10W	R2018	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R1109	1-216-817-11	METAL CHIP	470 5% 1/10W	R2019	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1110	1-216-817-11	METAL CHIP	470 5% 1/10W	R2020	1-216-821-11	METAL CHIP	1K 5% 1/10W
R1111	1-216-797-11	METAL CHIP	10 5% 1/10W	R2021	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1112	1-216-817-11	METAL CHIP	470 5% 1/10W	R2022	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1113	1-216-818-11	METAL CHIP	560 5% 1/10W	R2023	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1117	1-216-839-91	RES CHIP	33K 5% 1/10W	R2024	1-216-847-11	METAL CHIP	150K 5% 1/10W
R1118	1-216-817-11	METAL CHIP	470 5% 1/10W	R2025	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1119	1-216-839-91	RES CHIP	33K 5% 1/10W	R2027	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1120	1-216-864-11	SHORT CHIP	0	R2028	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1121	1-218-875-11	METAL CHIP	15K 0.5% 1/10W	R2030	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1122	1-216-864-11	SHORT CHIP	0	R2031	1-216-841-11	METAL CHIP	47K 5% 1/10W
R1123	1-216-817-11	METAL CHIP	470 5% 1/10W	R2032	1-216-818-11	METAL CHIP	560 5% 1/10W
R1124	1-216-864-11	SHORT CHIP	0	R2033	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R1127	1-216-864-11	SHORT CHIP	0	R2034	1-216-828-11	METAL CHIP	3.9K 5% 1/10W
R1129	1-216-864-11	SHORT CHIP	0	R2037	1-216-295-91	SHORT CHIP	0
R1200	1-216-864-11	SHORT CHIP	0	R2041	1-216-295-91	SHORT CHIP	0
R1201	1-216-864-11	SHORT CHIP	0	R2043	1-216-295-91	SHORT CHIP	0
R1202	1-216-864-11	SHORT CHIP	0	R2051	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1203	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R2052	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1209	1-216-833-11	METAL CHIP	10K 5% 1/10W	R2056	1-216-809-11	METAL CHIP	100 5% 1/10W
R1211	1-216-864-11	SHORT CHIP	0	R2057	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R1213	1-216-864-11	SHORT CHIP	0	R2058	1-216-845-91	RES CHIP	100K 5% 1/10W
R1304	1-216-864-11	SHORT CHIP	0	R2059	1-216-833-91	RES CHIP	10K 5% 1/10W
R1422	1-216-864-11	SHORT CHIP	0	R2060	1-216-833-11	METAL CHIP	10K 5% 1/10W
R1423	1-216-864-11	SHORT CHIP	0	R2061	1-216-829-11	METAL CHIP	4.7K 5% 1/10W

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REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R2062	1-216-845-91	RES CHIP	100K 5% 1/10W	R2454	1-216-821-11	METAL CHIP	1K 5% 1/10W
R2063	1-216-833-11	METAL CHIP	10K 5% 1/10W	R2455	1-216-821-11	METAL CHIP	1K 5% 1/10W
R2064	1-216-833-11	METAL CHIP	10K 5% 1/10W	R2457	1-216-841-11	METAL CHIP	47K 5% 1/10W
R2065	1-216-864-11	SHORT CHIP	0	R2460	1-216-845-11	METAL CHIP	100K 5% 1/10W
R2066	1-216-864-11	SHORT CHIP	0	R2461	1-216-821-11	METAL CHIP	1K 5% 1/10W
R2069	1-216-864-11	SHORT CHIP	0	R2463	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R2070	1-216-864-11	SHORT CHIP	0	R4113	1-216-813-11	METAL CHIP	220 5% 1/10W
R2071	1-216-864-11	SHORT CHIP	0	R5002	1-216-871-91	METAL CHIP	10K 5% 1/10W
R2072	1-216-864-11	SHORT CHIP	0	R5006	1-215-439-00	METAL	5.6K 1% 1/4W
R2073	1-216-864-11	SHORT CHIP	0	R5008	1-216-809-11	METAL CHIP	100 5% 1/10W
R2200	1-249-422-11	CARBON	2.7K 5% 1/4W	R5010	1-216-809-11	METAL CHIP	100 5% 1/10W
R2201	1-249-422-11	CARBON	2.7K 5% 1/4W	R5011	1-216-809-11	METAL CHIP	100 5% 1/10W
R2203	1-243-826-21	METAL OXIDE	4.7 5% 1W	R5013	1-216-809-11	METAL CHIP	100 5% 1/10W
R2204	1-216-828-11	METAL CHIP	3.9K 5% 1/10W	R5016	1-218-914-91	RES CHIP	620K 0.5% 1/10W
R2205	1-216-828-11	METAL CHIP	3.9K 5% 1/10W	R5017	1-216-809-11	METAL CHIP	100 5% 1/10W
R2206	1-243-826-21	METAL OXIDE	4.7 5% 1W	R5018	1-216-809-11	METAL CHIP	100 5% 1/10W
R2207	1-216-837-11	METAL CHIP	22K 5% 1/10W	R5019	1-216-845-11	METAL CHIP	100K 5% 1/10W
R2208	1-216-819-11	METAL CHIP	680 5% 1/10W	R5020	1-216-833-11	METAL CHIP	10K 5% 1/10W
R2209	1-216-837-11	METAL CHIP	22K 5% 1/10W	R5100	1-218-888-11	METAL CHIP	51K 0.5% 1/10W
R2210	1-216-819-11	METAL CHIP	680 5% 1/10W	R5101	1-218-853-11	METAL CHIP	1.8K 0.5% 1/10W
R2211	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5102	1-218-867-11	METAL CHIP	6.8K 0.5% 1/10W
R2212	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5103	1-216-818-11	METAL CHIP	560 5% 1/10W
R2214	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R5104	1-249-381-11	CARBON	1 5% 1/4W
R2215	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5105	1-249-383-11	CARBON	1.5 5% 1/4W
R2216	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5106	1-243-572-71	METAL OXIDE	470 5% 2W
R2300	1-216-817-11	METAL CHIP	470 5% 1/10W	R5107	1-249-395-11	CARBON	15 5% 1/4W
R2301	1-249-422-11	CARBON	2.7K 5% 1/4W	R5151	1-243-693-71	METAL OXIDE	270 5% 1W
R2302	1-216-809-11	METAL CHIP	100 5% 1/10W	R5152	1-249-381-11	CARBON	1 5% 1/4W
R2303	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R5153	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R2304	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R5154	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R2305	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5156	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R2306	1-216-864-11	SHORT CHIP	0	R5157	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R2307	1-216-811-11	METAL CHIP	150 5% 1/10W	R5304	1-216-833-11	METAL CHIP	10K 5% 1/10W
R2308	1-216-833-11	METAL CHIP	10K 5% 1/10W	R5307	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R2309	1-216-864-11	SHORT CHIP	0	R5308	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R2310	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5313	1-216-857-11	METAL CHIP	1M 5% 1/10W
R2311	1-216-838-11	METAL CHIP	27K 5% 1/10W	R5314	1-216-809-11	METAL CHIP	100 5% 1/10W
R2312	1-216-832-11	METAL CHIP	8.2K 5% 1/10W	R5320	1-216-833-11	METAL CHIP	10K 5% 1/10W
R2314	1-216-841-11	METAL CHIP	47K 5% 1/10W	R5324	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R2315	1-216-833-11	METAL CHIP	10K 5% 1/10W	R5325	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R2400	1-216-833-11	METAL CHIP	10K 5% 1/10W	R5326	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R2401	1-216-833-11	METAL CHIP	10K 5% 1/10W	R5328	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R2402	1-216-833-11	METAL CHIP	10K 5% 1/10W	R5329	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R2403	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R5330	1-218-883-11	METAL CHIP	33K 0.5% 1/10W
R2404	1-216-295-91	SHORT CHIP	0	R5331	1-218-881-11	METAL CHIP	27K 0.5% 1/10W
R2405	1-216-821-11	METAL CHIP	1K 5% 1/10W	R5333	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R2450	1-216-825-11	METAL CHIP	1K 5% 1/10W	R5334	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R2451	1-216-864-11	SHORT CHIP	0	R5336	1-218-891-11	METAL CHIP	68K 0.5% 1/10W
R2452	1-216-864-11	SHORT CHIP	0	R5338	1-218-911-11	METAL CHIP	470K 0.5% 1/10W
R2453	1-216-821-11	METAL CHIP	1K 5% 1/10W	R5340	1-218-891-11	METAL CHIP	68K 0.5% 1/10W

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R5344	1-249-395-11	CARBON	15 5% 1/4W	R5836	1-216-809-11	METAL CHIP	100 5% 1/10W
R5349	1-218-885-11	METAL CHIP	39K 0.5% 1/10W	R5837	1-216-809-11	METAL CHIP	100 5% 1/10W
R5353	1-216-857-11	METAL CHIP	1M 5% 1/10W	R5838	1-216-809-11	METAL CHIP	100 5% 1/10W
R5354	1-216-864-11	SHORT CHIP	0	R6200	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R5358	1-216-353-00	METAL OXIDE	2.2 5% 1W	R6201	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R5359	1-216-837-11	METAL CHIP	22K 5% 1/10W	R6202	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W
R5360	1-218-887-11	METAL CHIP	47K 0.5% 1/10W	R6203	1-218-839-11	METAL CHIP	470 0.5% 1/10W
R5361	1-216-849-11	METAL CHIP	220K 5% 1/10W	R6204	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R5364	1-260-296-11	CARBON	2.2 5% 1/2W	R6205	1-218-851-11	METAL CHIP	1.5K 0.5% 1/10W
R5365	1-216-849-11	METAL CHIP	220K 5% 1/10W	R6206	1-218-837-11	METAL CHIP	390 0.5% 1/10W
R5367	1-216-837-11	METAL CHIP	22K 5% 1/10W	R6210	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R5368	1-216-809-11	METAL CHIP	100 5% 1/10W	R6212	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R5369	1-216-809-11	METAL CHIP	100 5% 1/10W	R6213	1-211-991-11	METAL CHIP	82 0.5% 1/10W
R5370	1-216-805-11	METAL CHIP	47 5% 1/10W	R7000	1-216-809-11	METAL CHIP	100 5% 1/10W
R5400	1-218-864-91	RES CHIP	5.1K 0.5% 1/10W	R7001	1-216-809-11	METAL CHIP	100 5% 1/10W
R5401	1-218-859-91	RES CHIP	3.3K 0.5% 1/10W	R7002	1-216-809-11	METAL CHIP	100 5% 1/10W
R5402	1-218-864-91	RES CHIP	5.1K 0.5% 1/10W	R7003	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5403	1-218-859-91	RES CHIP	3.3K 0.5% 1/10W	R7004	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5404	1-249-383-11	CARBON	1.5 5% 1/4W	R7005	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5405	1-249-389-11	CARBON	4.7 5% 1/4W	R7006	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5406	1-247-791-91	CARBON	22 5% 1/4W	R7007	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5407	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R7008	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5408	1-243-535-71	METAL OXIDE	220 5% 3W	R7009	1-216-833-11	METAL CHIP	10K 5% 1/10W
R5409	1-214-798-21	METAL	1.8 1% 1/2W	R7010	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R5410	1-214-798-21	METAL	1.8 1% 1/2W	R7011	1-216-805-11	METAL CHIP	47 5% 1/10W
R5802	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R7012	1-216-805-11	METAL CHIP	47 5% 1/10W
R5803	1-216-809-11	METAL CHIP	100 5% 1/10W	R7013	1-216-805-11	METAL CHIP	47 5% 1/10W
R5804	1-216-815-11	METAL CHIP	330 5% 1/10W	R7014	1-216-809-11	METAL CHIP	100 5% 1/10W
R5805	1-216-817-11	METAL CHIP	470 5% 1/10W	R7015	1-216-863-11	METAL CHIP	3.3M 5% 1/10W
R5806	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R7016	1-216-821-11	METAL CHIP	1K 5% 1/10W
R5808	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R7017	1-216-809-11	METAL CHIP	100 5% 1/10W
R5809	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R7018	1-216-834-11	METAL CHIP	12K 5% 1/10W
R5810	1-216-837-11	METAL CHIP	22K 5% 1/10W	R7019	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R5811	1-216-821-11	METAL CHIP	1K 5% 1/10W	R7021	1-216-809-11	METAL CHIP	100 5% 1/10W
R5812	1-216-833-11	METAL CHIP	10K 5% 1/10W	R7022	1-216-809-11	METAL CHIP	100 5% 1/10W
R5813	1-216-826-11	METAL CHIP	2.7K 5% 1/10W	R7024	1-216-809-11	METAL CHIP	100 5% 1/10W
R5814	1-216-809-11	METAL CHIP	100 5% 1/10W	R7025	1-216-809-11	METAL CHIP	100 5% 1/10W
R5815	1-216-809-11	METAL CHIP	100 5% 1/10W	R7027	1-216-809-11	METAL CHIP	100 5% 1/10W
R5816	1-216-864-11	SHORT CHIP	0	R7028	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R5817	1-216-864-11	SHORT CHIP	0	R7029	1-216-835-11	METAL CHIP	15K 5% 1/10W
R5819	1-216-818-11	METAL CHIP	560 5% 1/10W	R7030	1-216-817-11	METAL CHIP	470 5% 1/10W
R5820	1-216-833-11	METAL CHIP	10K 5% 1/10W	R7032	1-216-833-11	METAL CHIP	10K 5% 1/10W
R5822	1-216-809-11	METAL CHIP	100 5% 1/10W	R7034	1-216-864-11	SHORT CHIP	0
R5823	1-216-809-11	METAL CHIP	100 5% 1/10W	R7042	1-216-809-11	METAL CHIP	100 5% 1/10W
R5830	1-216-864-11	SHORT CHIP	0	R7057	1-216-864-11	SHORT CHIP	0
R5831	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R7060	1-216-864-11	SHORT CHIP	0
R5832	1-218-271-11	METAL CHIP	2K 5% 1/10W	R7061	1-216-864-11	SHORT CHIP	0
R5833	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R8001	1-216-841-11	METAL CHIP	47K 5% 1/10W
R5834	1-216-809-11	METAL CHIP	100 5% 1/10W	R8008	1-216-864-11	SHORT CHIP	0
R5835	1-216-809-11	METAL CHIP	100 5% 1/10W	R8009	1-216-864-11	SHORT CHIP	0

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R8011	1-216-864-11	SHORT CHIP	0	R1053	NOT FITTED		
< THERMISTOR >				R1054	1-216-864-11	SHORT CHIP	0
TH5400	1-800-193-00	THERMISTOR		R1056	NOT FITTED		
< CRYSTAL >				R5000	1-218-887-11	METAL CHIP	47K 0.5% 1/10W
X300	1-579-126-11	VIBRATOR, CERAMIC		R5001	1-216-841-11	METAL CHIP	47K 5% 1/10W
X2000	1-781-148-21	VIBRATOR, CRYSTAL		R5003	1-218-887-11	METAL CHIP	47K 0.5% 1/10W
X7000	1-760-895-21	VIBRATOR, CERAMIC		R5004	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
X8001	1-760-105-11	VIBRATOR, CRYSTAL		R5005	1-218-819-11	METAL CHIP	22K 0.5% 1/10W
A Board Variants KV-32HQ100				R5007	NOT FITTED		
< CAPACITOR >				R5009	NOT FITTED		
C1009	NOT FITTED			R5012	NOT FITTED		
C1010	NOT FITTED			R5014	NOT FITTED		
C1011	NOT FITTED			R5015	1-218-883-11	METAL CHIP	33K 0.5% 1/10W
C1013	NOT FITTED			R5310	1-218-887-11	METAL CHIP	47K 0.5% 1/10W
C5320	1-100-143-21	FILM	0.0047UF 5% 630V	R5311	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
C5322	NOT FITTED			R5350	1-218-866-11	METAL CHIP	6.2K 0.5% 1/10W
C7030	NOT FITTED			R5371	1-216-295-91	SHORT CHIP	0
< CONNECTOR >				R5372	1-216-295-91	SHORT CHIP	0
CN1017	NOT FITTED			R5411	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
CN1018	NOT FITTED			R5413	1-216-833-11	METAL CHIP	10K 5% 1/10W
CN1019	NOT FITTED			R5414	1-216-845-11	METAL CHIP	100K 5% 1/10W
CN5010	NOT FITTED			R5415	1-216-841-11	METAL CHIP	47K 5% 1/10W
< DIODE >				R5821	1-216-830-11	METAL CHIP	5.6K 5% 1/10W
D1009	NOT FITTED			R7043	NOT FITTED		
D1010	NOT FITTED			R7044	NOT FITTED		
D1011	NOT FITTED			R7045	NOT FITTED		
D7012	NOT FITTED			R7046	NOT FITTED		
< COIL >				R7047	NOT FITTED		
L5300	1-406-989-21	INDUCTOR	10ME	R7048	NOT FITTED		
L5301	1-406-989-21	INDUCTOR	10ME	R7049	NOT FITTED		
L5302	NOT FITTED			R7050	NOT FITTED		
< TRANSISTOR >				R7052	NOT FITTED		
Q7006	NOT FITTED			R7053	NOT FITTED		
Q7007	NOT FITTED			R7054	NOT FITTED		
Q7008	NOT FITTED			R7055	NOT FITTED		
Q7009	NOT FITTED			R7058	NOT FITTED		
Q7010	NOT FITTED			R7059	NOT FITTED		
< RESISTOR >				R7062	NOT FITTED		
R1050	NOT FITTED			R7063	NOT FITTED		
R1051	NOT FITTED			R7065	NOT FITTED		
R1052	NOT FITTED			< THERMISTOR >			
< CAPACITOR >				TH5000	NOT FITTED		
C1009	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V	A Board Variants KV-36HQ100			
C1010	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V	< CAPACITOR >			
C1011	1-126-947-11	ELECT	47UF 20.00% 35V	C1009	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V

A C2

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

C2

REF.NO.	PART.NO.	DESCRIPTION	REMARK
C5103	1-107-826-91	CERAMIC CHIP 0.1UF	10.00% 16V
C5320	1-100-145-21	FILM 0.01UF	5% 630V
C5322	1-136-314-91	FILM 0.022UF	5% 630V
C7030	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
< CONNECTOR >			
CN1017	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN1018	* 1-564-507-11	PLUG, CONNECTOR 4P	
CN1019	1-784-009-11	CONNECTOR, USB (A)	
CN5010	1-564-506-71	PLUG, CONNECTOR 3P	
< DIODE >			
D1009	8-719-914-43	DIODE DAP202K	
D1010	8-719-914-44	DIODE DAP202K	
D1011	8-719-069-55	DIODE DULSTE-175.68	
D7012	8-719-988-61	DIODE 1SS355TE-17	
< COIL >			
L5300	1-406-988-21	INDUCTOR 6.8MH	
L5301	1-406-987-21	INDUCTOR 4.7MH	
L5302	1-406-674-11	INDUCTOR 3.3MH	
< TRANSISTOR >			
Q7006	8-729-010-05	TRANSISTOR MSB709-RT1	
Q7007	8-729-010-05	TRANSISTOR MSB709-RT1	
Q7008	8-729-010-05	TRANSISTOR MSB709-RT1	
Q7009	8-729-010-29	TRANSISTOR MSD601-RST1	
Q7010	8-729-010-29	TRANSISTOR MSD601-RST1	
< RESISTOR >			
R1050	1-216-835-11	METAL CHIP 15K 5% 1/10W	
R1051	1-216-835-11	METAL CHIP 15K 5% 1/10W	
R1052	1-216-803-11	METAL CHIP 33 5% 1/10W	
R1053	1-216-803-11	METAL CHIP 33 5% 1/10W	
R1054	NOT FITTED		
R1056	1-216-864-11	SHORT CHIP 0	
R5000	1-218-891-11	METAL CHIP 68K 0.5% 1/10W	
R5001	1-216-843-11	METAL CHIP 68K 5% 1/10W	
R5003	1-218-879-11	METAL CHIP 22K 0.5% 1/10W	
R5004	1-218-869-11	METAL CHIP 8.2K 0.5% 1/10W	
R5005	1-216-835-11	METAL CHIP 15K 5% 1/10	
R5007	1-218-913-91	METAL CHIP 560K 0.5% 1/10W	
R5009	1-218-903-11	METAL CHIP 220K 0.5% 1/10W	
R5012	1-216-809-11	METAL CHIP 100 5% 1/10W	
R5014	1-216-809-11	METAL CHIP 100 5% 1/10W	
R5015	1-216-845-11	METAL CHIP 100 5% 1/10W	
R5310	1-218-891-11	METAL CHIP 68K 0.5% 1/10W	
R5311	1-218-875-11	METAL CHIP 15K 0.5% 1/10W	
R5350	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R5371	NOT FITTED		

REF.NO.	PART.NO.	DESCRIPTION	REMARK
R5372	NOT FITTED		
R5411	1-216-826-11	METAL CHIP 2.7K 5% 1/10W	
R5413	1-216-832-11	METAL CHIP 8.2K 5% 1/10W	
R5414	1-216-843-11	METAL CHIP 68K 5% 1/10W	
R5415	1-216-838-11	METAL CHIP 27K 5% 1/10W	
R5821	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7043	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R7044	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R7045	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R7046	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7047	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7048	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7049	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R7050	1-218-863-11	METAL CHIP 4.7K 0.5% 1/10W	
R7052	1-218-863-11	METAL CHIP 4.7K 0.5% 1/10W	
R7053	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R7054	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R7055	1-216-825-11	METAL CHIP 2.2K 5% 1/10W	
R7058	1-218-855-11	RES CHIP 2.2K 0.5% 1/10W	
R7059	1-218-847-91	RES CHIP 1K 0.5% 1/10W	
R7062	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7063	1-216-817-11	METAL CHIP 470 5% 1/10W	
R7065	1-216-845-11	METAL CHIP 100K 5% 1/10W	
< THERMISTOR >			
TH5000	1-778-293-11	THERMISTOR	
A Board Variants 32/36HQ100B			
< TUNER >			
TU1100	8-598-536-20	FRONTEND BTF-EF412	
TU1200	8-598-536-20	FRONTEND BTF-EF412	
A Board Variants 32/36HQ100E & 32/36HQ100K			
< TUNER >			
TU1100	8-598-534-20	FRONTEND BTF-EC412	
TU1200	8-598-534-20	FRONTEND BTF-EC412	
* A-1405-502-A C2 Board, Complete			
4-382-854-11	SCREW (M3X10), P, SW (+)		
< CAPACITOR >			
C7301	1-128-527-11	ELECT 3300F 20.00% 25V	
C7302	1-104-653-11	ELECT 220UF 20.00% 16V	
C7303	1-162-920-11	CERAMIC CHIP 27PF 5.00% 50V	
C7304	1-164-004-11	CERAMIC CHIP 0.1UF 10.00% 25V	
C7305	1-104-653-11	ELECT 220UF 20.00% 16V	
C7306	1-162-920-11	CERAMIC CHIP 27PF 5.00% 50V	

REF.NO.	PART.NO.	DESCRIPTION	REMARK
C7307	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C7308	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C7309	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C7310	1-107-961-91	ELECT 10UF	20.00% 250V
C7311	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C7312	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C7313	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C7314	1-107-961-91	ELECT 10UF	20.00% 250V
C7315	1-161-830-00	CERAMIC 0.0047UF	500V
C7316	1-162-920-11	CERAMIC CHIP 27PF	5.00% 50V
C7317	1-161-830-00	CERAMIC 0.0047UF	500V
C7318	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C7319	1-107-961-91	ELECT 10UF	20.00% 250V
C7320	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C7321	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C7323	1-161-830-00	CERAMIC 0.0047UF	500V
C7326	1-115-350-51	CERAMIC 0.0047UF	2KV
C7327	1-107-662-11	ELECT 22UF	20.00% 350V
C7328	1-115-350-51	CERAMIC 0.0047UF	2KV
C7329	1-162-116-00	CERAMIC 680PF	10.00% 2KV
C7330	1-162-925-11	CERAMIC CHIP 68PF	5.00% 50V
C7331	1-162-925-11	CERAMIC CHIP 68PF	5.00% 50V
C7332	1-162-925-11	CERAMIC CHIP 68PF	5.00% 50V
< CONNECTOR >			
CN7301	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN7304	1-695-915-11	TAB (CONTACT)	
CN7305	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN7307	1-695-915-11	TAB (CONTACT)	
< DIODE >			
D7304	8-719-988-61	DIODE 1SS355TE-17	
D7307	8-719-051-85	DIODE BSS83TD	
D7308	8-719-051-85	DIODE BSS83TD	
D7310	8-719-051-85	DIODE BSS83TD	
D7311	8-719-110-17	DIODE RD10ESB2	
D7312	8-719-908-03	DIODE GP08D	
< IC >			
IC7301	8-759-680-01	IC TDA6120Q/NZ/S1	
IC7302	8-759-680-01	IC TDA6120Q/NZ/S1	
IC7303	8-759-680-01	IC TDA6120Q/NZ/S1	
< COIL >			
L7301	1-408-592-11	INDUCTOR 1.2UH	
L7302	1-408-399-00	INDUCTOR 1.5UH	
L7303	1-408-592-11	INDUCTOR 1.2UH	
L7304	1-406-666-21	INDUCTOR 150UH	

REF.NO.	PART.NO.	DESCRIPTION	REMARK
< TRANSISTOR >			
Q7301	8-729-216-22	TRANSISTOR 2SA1162-G	
Q7302	8-729-216-22	TRANSISTOR 2SA1162-G	
Q7303	8-729-216-22	TRANSISTOR 2SA1162-G	
Q7304	8-729-216-22	TRANSISTOR 2SA1162-G	
Q7305	8-729-141-73	TRANSISTOR 2SC3624A-T1115L16	
Q7306	8-729-141-73	TRANSISTOR 2SC3624A-T1115L16	
Q7307	8-729-141-73	TRANSISTOR 2SC3624A-T1115L16	
< RESISTOR >			
JR7327	1-216-295-91	SHORT CHIP 0	
R7302	1-216-025-11	RES-CHIP 100 5% 1/10W	
R7303	1-216-025-11	RES-CHIP 100 5% 1/10W	
R7304	1-216-025-11	RES-CHIP 100 5% 1/10W	
R7305	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R7308	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R7309	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R7310	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7311	1-216-812-11	METAL CHIP 180 5% 1/10W	
R7312	1-215-428-00	METAL 2K 1% 1/4W	
R7313	1-218-851-11	METAL CHIP 1.5K 0.5% 1/10W	
R7314	1-216-864-11	SHORT CHIP 0	
R7315	1-215-435-00	METAL 3.9K 1% 1/4W	
R7316	1-216-812-11	METAL CHIP 180 5% 1/10W	
R7317	1-218-851-11	METAL CHIP 1.5K 0.5% 1/10W	
R7318	1-216-025-11	RES-CHIP 100 5% 1/10W	
R7319	1-216-848-11	METAL CHIP 180K 5% 1/10W	
R7320	1-216-848-11	METAL CHIP 180K 5% 1/10W	
R7322	1-216-838-11	METAL CHIP 27K 5% 1/10W	
R7323	1-216-025-11	RES-CHIP 100 5% 1/10W	
R7324	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7325	1-216-812-11	METAL CHIP 180 5% 1/10W	
R7326	1-216-848-11	METAL CHIP 180K 5% 1/10W	
R7327	1-216-848-11	METAL CHIP 180K 5% 1/10W	
R7328	1-218-851-11	METAL CHIP 1.5K 0.5% 1/10W	
R7329	1-243-624-71	METAL OXIDE 33K 5% 3W	
R7330	1-216-838-11	METAL CHIP 27K 5% 1/10W	
R7331	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7332	1-243-624-71	METAL OXIDE 33K 5% 3W	
R7333	1-219-744-11	METAL 220 5% 1/2W	
R7335	1-216-025-11	RES-CHIP 100 5% 1/10W	
R7337	1-216-848-11	METAL CHIP 180K 5% 1/10W	
R7338	1-216-848-11	METAL CHIP 180K 5% 1/10W	
R7340	1-219-744-11	METAL 220 5% 1/2W	
R7341	1-216-838-11	METAL CHIP 27K 5% 1/10W	
R7342	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R7344	1-243-624-71	METAL OXIDE 33K 5% 3W	
R7345	1-219-744-11	METAL 220 5% 1/2W	

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK			
R7348	1-202-847-00	SOLID	560K 20% 1/2W	C2650	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C3331	1-164-346-11	CERAMIC CHIP 1UF	16V	C3678	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V			
R7350	1-219-743-11	METAL	100 5% 1/2W	C2651	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3332	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3679	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V			
R7351	1-219-743-11	METAL	100 5% 1/2W	C2652	1-126-947-11	ELECT	47UF	20.00% 35V	C3333	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C9106	1-126-947-11	ELECT	47UF	20.00% 35V	
R7353	1-535-303-00	LEAD, JUMPER (5.0MM)		C2653	1-164-346-11	CERAMIC CHIP 1UF	16V	C3334	1-126-964-11	ELECT	100UF	20.00% 50V	< CONNECTOR >					
R7354	1-535-303-00	LEAD, JUMPER (5.0MM)		C2654	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C3335	1-126-947-11	ELECT	47UF	20.00% 35V	< DIODE >					
R7355	1-535-303-00	LEAD, JUMPER (5.0MM)		C2655	1-126-947-11	ELECT	47UF	20.00% 35V	C3336	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	CN1001	* 1-793-498-11	CONNECTOR, BOARD TO BOARD 50P			
R7357	1-535-303-00	LEAD, JUMPER (5.0MM)		C2656	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3337	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	CN3601	* 1-816-666-11	CONNECTOR, RGB 21P				
R7358	1-535-303-00	LEAD, JUMPER (5.0MM)		C2657	1-164-346-11	CERAMIC CHIP 1UF	16V	C3338	1-164-346-11	CERAMIC CHIP 1UF	16V	CN3602	* 1-816-666-11	CONNECTOR, RGB 21P				
R7359	1-535-303-00	LEAD, JUMPER (5.0MM)		C2675	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3339	1-164-346-11	CERAMIC CHIP 1UF	16V	< DIODE >						
R7360	1-535-143-31	LEAD, JUMPER (15.0MM)		C2676	1-164-346-11	CERAMIC CHIP 1UF	16V	C3342	1-104-665-11	ELECT	1000UF	20.00% 25V	< DIODE >					
R7362	1-535-143-31	LEAD, JUMPER (15.0MM)		C2677	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3343	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	D2300	8-719-083-57	DIODE UDZS-TL173.6B				
R7363	1-216-295-91	SHORT CHIP	0	C2678	1-164-346-11	CERAMIC CHIP 1UF	16V	C3400	1-126-947-11	ELECT	47UF	20.00% 35V	D2600	8-719-083-82	DIODE UDZS-TL17-12B			
R7364	1-216-839-11	METAL CHIP	33K 5% 1/10W	C2700	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3401	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2602	8-719-083-82	DIODE UDZS-TL17-12B				
R7365	1-216-839-11	METAL CHIP	33K 5% 1/10W	C2701	1-164-346-11	CERAMIC CHIP 1UF	16V	C3402	1-126-947-11	ELECT	47UF	20.00% 35V	D2626	8-719-083-82	DIODE UDZS-TL17-12B			
R7366	1-216-839-11	METAL CHIP	33K 5% 1/10W	C2702	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3403	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2628	8-719-083-82	DIODE UDZS-TL17-12B				
R7367	1-249-377-11	CARBON	0.47 5% 1/4W	C2703	1-164-346-11	CERAMIC CHIP 1UF	16V	C3406	1-126-964-11	ELECT	100UF	20.00% 50V	D2650	8-719-083-82	DIODE UDZS-TL17-12B			
R7368	1-249-377-11	CARBON	0.47 5% 1/4W	C2705	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C3407	1-126-964-11	ELECT	100UF	20.00% 50V	D2651	8-719-083-82	DIODE UDZS-TL17-12B			
R7369	1-260-328-11	CARBON	1K 5% 1/2W	C2706	1-104-665-11	ELECT	100UF	20.00% 25V	C3408	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D2652	8-719-083-82	DIODE UDZS-TL17-12B			
< RESISTOR VARIABLE >				C2707	1-104-665-11	ELECT	100UF	20.00% 25V	C3410	1-126-941-11	ELECT	470UF	20.00% 25V	D2653	8-719-083-82	DIODE UDZS-TL17-12B		
R73701	1-241-714-11	RES, ADJ, METAL FILM 110M		C3100	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C3411	1-164-156-11	CERAMIC CHIP 0.1UF	25V	D2675	8-719-083-82	DIODE UDZS-TL17-12B				
< SPARK GAP >				C3101	1-104-665-11	ELECT	100UF	20.00% 25V	C3412	1-126-968-11	ELECT	100UF	20.00% 50V	D2676	8-719-083-82	DIODE UDZS-TL17-12B		
SG7301	1-519-421-11	GAP, DISCHARGE		C3102	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C3413	1-164-346-11	CERAMIC CHIP 1UF	16V	D2700	8-719-083-82	DIODE UDZS-TL17-12B				
* A-1405-503-A J4 Board, Complete				C3103	1-104-665-11	ELECT	100UF	20.00% 25V	C3414	1-164-346-11	CERAMIC CHIP 1UF	16V	D2701	8-719-083-82	DIODE UDZS-TL17-12B			
< CAPACITOR >				C3105	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C3415	1-164-346-11	CERAMIC CHIP 1UF	16V	D3600	8-719-083-82	DIODE UDZS-TL17-12B				
C2300	1-107-715-11	ELECT	22UF	20.00% 50V	C3106	1-104-665-11	ELECT	100UF	20.00% 25V	C3416	1-164-346-11	CERAMIC CHIP 1UF	16V	D3601	8-719-083-82	DIODE UDZS-TL17-12B		
C2303	1-104-665-11	ELECT	100UF	20.00% 25V	C3107	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C3417	1-164-346-11	CERAMIC CHIP 1UF	16V	D3602	8-719-083-82	DIODE UDZS-TL17-12B			
C2304	1-104-665-11	ELECT	100UF	20.00% 25V	C3108	1-104-665-11	ELECT	100UF	20.00% 25V	C3418	1-164-346-11	CERAMIC CHIP 1UF	16V	D3603	8-719-083-82	DIODE UDZS-TL17-12B		
C2305	1-126-941-11	ELECT	470UF	20.00% 25V	C3110	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	C3419	1-104-665-11	ELECT	100UF	20.00% 25V	D3604	8-719-083-82	DIODE UDZS-TL17-12B		
C2306	1-104-665-11	ELECT	100UF	20.00% 25V	C3111	1-104-665-11	ELECT	100UF	20.00% 25V	C3420	1-104-665-11	ELECT	100UF	20.00% 25V	D3605	8-719-083-82	DIODE UDZS-TL17-12B	
C2307	1-104-665-11	ELECT	100UF	20.00% 25V	C3300	1-126-947-11	ELECT	47UF	20.00% 35V	C3421	1-104-665-11	ELECT	100UF	20.00% 25V	D3606	8-719-083-82	DIODE UDZS-TL17-12B	
C2308	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3301	1-162-970-11	CERAMIC CHIP 0.01UF	10.00% 25V	C3450	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V	D3625	8-719-083-82	DIODE UDZS-TL17-12B				
C2309	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3302	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3451	1-126-933-11	ELECT	100UF	20.00% 16V	D3626	8-719-083-82	DIODE UDZS-TL17-12B			
C2600	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C3304	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3500	1-126-947-11	ELECT	47UF	20.00% 35V	D3627	8-719-083-82	DIODE UDZS-TL17-12B			
C2601	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3305	1-164-346-11	CERAMIC CHIP 1UF	16V	C3501	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D3628	8-719-083-82	DIODE UDZS-TL17-12B				
C2602	1-164-346-11	CERAMIC CHIP 1UF	16V	C3310	1-104-665-11	ELECT	100UF	20.00% 25V	C3502	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	D3629	8-719-083-82	DIODE UDZS-TL17-12B			
C2603	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C3313	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C3503	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	D3630	8-719-083-82	DIODE UDZS-TL17-12B				
C2604	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3314	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3504	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	D3631	8-719-083-82	DIODE UDZS-TL17-12B				
C2605	1-164-346-11	CERAMIC CHIP 1UF	16V	C3315	1-126-964-11	ELECT	10UF	20.00% 50V	C3505	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	D3650	8-719-083-82	DIODE UDZS-TL17-12B			
C2625	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C3317	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3506	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	D3651	8-719-083-82	DIODE UDZS-TL17-12B				
C2626	1-126-947-11	ELECT	47UF	20.00% 35V	C3318	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C3507	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V	D3652	8-719-083-82	DIODE UDZS-TL17-12B			
C2627	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3319	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3600	1-104-665-11	ELECT	100UF	20.00% 25V	D3653	8-719-083-82	DIODE UDZS-TL17-12B			
C2628	1-164-346-11	CERAMIC CHIP 1UF	16V	C3320	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	C3601	1-127-715-91	CERAMIC CHIP 0.22UF	10% 16V	D3654	8-719-083-82	DIODE UDZS-TL17-12B				
C2629	1-162-968-11	CERAMIC CHIP 0.0047UF	10.00% 50V	C3321	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3616	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	D3675	8-719-083-82	DIODE UDZS-TL17-12B				
C2630	1-126-947-11	ELECT	47UF	20.00% 35V	C3322	1-162-915-11	CERAMIC CHIP 10PF	0.50PF 50V	C3631	1-165-908-11	CERAMIC CHIP 1UF	10% 10V	D3676	8-719-083-82	DIODE UDZS-TL17-12B			
C2631	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3323	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3650	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D3677	8-719-083-82	DIODE UDZS-TL17-12B				
C2632	1-164-346-11	CERAMIC CHIP 1UF	16V	C3324	1-162-915-11	CERAMIC CHIP 10PF	0.50PF 50V	C3653	1-126-964-11	ELECT	10UF	20.00% 50V	D3700	8-719-083-82	DIODE UDZS-TL17-12B			
C2633	1-164-346-11	CERAMIC CHIP 1UF	16V	C3325	1-162-927-11	CERAMIC CHIP 100PF	5.00% 50V	C3654	1-126-964-11	ELECT	10UF	20.00% 50V	D3701	8-719-083-82	DIODE UDZS-TL17-12B			
C2634	1-164-346-11	CERAMIC CHIP 1UF	16V	C3327	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	C3675	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V	D3702	8-719-056-84	DIODE UDZ-TE-17-7.5B				
C2635	1-164-346-11	CERAMIC CHIP 1UF	16V	C3328	1-164-346-11	CERAMIC CHIP 1UF	16V	C3676	1-104-665-11	ELECT	100UF	20.00% 25V						
C2636	1-164-346-11	CERAMIC CHIP 1UF	16V	C3330	1-164-346-11	CERAMIC CHIP 1UF	16V	C3677	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V							

J4

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
< FERRITE BEAD >				< RESISTOR >			
FB8800	1-469-869-21	FERRITE	OUR	R2306	1-216-811-11	METAL CHIP 150 5%	1/10W
< FILTER >				R2307	1-216-811-11	METAL CHIP 150 5%	1/10W
FL3300	1-236-071-11	ENCAPSULATED COMPONENT		R2308	1-216-811-11	METAL CHIP 150 5%	1/10W
FL3301	1-236-071-11	ENCAPSULATED COMPONENT		R2309	1-216-811-11	METAL CHIP 150 5%	1/10W
FL3400	1-236-071-11	ENCAPSULATED COMPONENT		R2310	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
FL3500	1-236-071-11	ENCAPSULATED COMPONENT					
< IC >				R2311	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
IC2300	8-759-576-76	IC TDA2822D013TR		R2312	1-249-389-11	CARBON 4.7 5%	1/4W
IC3300	8-752-096-83	IC CXA2149AQ-TL		R2313	1-249-389-11	CARBON 4.7 5%	1/4W
IC3400	8-752-068-45	IC CXA1855Q		R2314	1-216-813-11	METAL CHIP 220 5%	1/10W
IC3500	8-759-587-03	IC TDA8601T		R2315	1-216-813-11	METAL CHIP 220 5%	1/10W
< COIL >				R2316	1-216-837-11	METAL CHIP 22K 5%	1/10W
L3305	1-414-934-21	INDUCTOR 100H		R2317	1-216-837-11	METAL CHIP 22K 5%	1/10W
L3308	1-414-934-21	INDUCTOR 100H		R2321	1-216-864-11	SHORT CHIP 0	
< TRANSISTOR >				R2325	1-216-864-11	SHORT CHIP 0	
Q2301	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2331	1-216-864-11	SHORT CHIP 0	
Q2301	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2600	1-216-817-11	METAL CHIP 470 5%	1/10W
Q2302	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2601	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q2303	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2602	1-216-813-11	METAL CHIP 220 5%	1/10W
Q2625	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2603	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q2626	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2604	1-216-853-11	METAL CHIP 470K 5%	1/10W
Q3300	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2605	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
Q3302	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2606	1-216-817-11	METAL CHIP 470 5%	1/10W
Q3303	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2607	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q3305	8-729-038-96	TRANSISTOR IM21A-T109		R2608	1-216-813-11	METAL CHIP 220 5%	1/10W
Q3306	8-729-038-96	TRANSISTOR IM21A-T109		R2609	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q3310	8-729-038-96	TRANSISTOR IM21A-T109		R2610	1-216-853-11	METAL CHIP 470K 5%	1/10W
Q3311	8-729-038-96	TRANSISTOR IM21A-T109		R2611	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
Q3312	8-729-038-96	TRANSISTOR IM21A-T109		R2625	1-216-817-11	METAL CHIP 470 5%	1/10W
Q3400	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2626	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q3401	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2627	1-216-813-11	METAL CHIP 220 5%	1/10W
Q3402	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R2628	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
Q3403	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2629	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q3404	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R		R2630	1-216-853-11	METAL CHIP 470K 5%	1/10W
Q3405	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2631	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
Q3406	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2632	1-216-817-11	METAL CHIP 470 5%	1/10W
Q3407	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2633	1-216-841-11	METAL CHIP 47K 5%	1/10W
Q3410	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2634	1-216-813-11	METAL CHIP 220 5%	1/10W
Q3600	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2635	1-216-829-11	METAL CHIP 4.7K 5%	1/10W
Q3625	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2636	1-216-821-11	METAL CHIP 1K 5%	1/10W
Q3650	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2637	1-216-853-11	METAL CHIP 470K 5%	1/10W
Q3651	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2638	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
Q3652	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2650	1-216-817-11	METAL CHIP 470 5%	1/10W
Q8824	8-729-120-28	TRANSISTOR 2SC1623-LSL6		R2651	1-216-841-11	METAL CHIP 47K 5%	1/10W
				R2652	1-216-813-11	METAL CHIP 220 5%	1/10W
				R2654	1-216-821-11	METAL CHIP 1K 5%	1/10W
				R2655	1-216-853-11	METAL CHIP 470K 5%	1/10W
				R2656	1-216-827-11	METAL CHIP 3.3K 5%	1/10W
				R2658	1-216-817-11	METAL CHIP 470 5%	1/10W

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REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R2659	1-216-841-11	METAL CHIP 47K 5%	1/10W	R3146	1-216-864-11	SHORT CHIP 0	
R2660	1-216-813-11	METAL CHIP 220 5%	1/10W	R3147	1-216-864-11	SHORT CHIP 0	
R2661	1-216-821-11	METAL CHIP 1K 5%	1/10W	R3300	1-218-827-11	METAL CHIP 150 0.5%	1/10W
R2662	1-216-853-11	METAL CHIP 470K 5%	1/10W	R3301	1-218-827-11	METAL CHIP 150 0.5%	1/10W
R2663	1-216-827-11	METAL CHIP 3.3K 5%	1/10W	R3310	1-216-839-11	METAL CHIP 33K 5%	1/10W
R2675	1-216-821-11	METAL CHIP 1K 5%	1/10W	R3311	1-216-841-11	METAL CHIP 47K 5%	1/10W
R2676	1-216-853-11	METAL CHIP 470K 5%	1/10W	R3313	1-216-817-11	METAL CHIP 470 5%	1/10W
R2677	1-216-827-11	METAL CHIP 3.3K 5%	1/10W	R3314	1-216-819-11	METAL CHIP 680 5%	1/10W
R2679	1-216-821-11	METAL CHIP 1K 5%	1/10W	R3315	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R2680	1-216-853-11	METAL CHIP 470K 5%	1/10W	R3317	1-216-843-11	METAL CHIP 68K 5%	1/10W
R2681	1-216-827-11	METAL CHIP 3.3K 5%	1/10W	R3318	1-216-843-11	METAL CHIP 68K 5%	1/10W
R2700	1-216-821-11	METAL CHIP 1K 5%	1/10W	R3319	1-218-885-11	METAL CHIP 39K 0.5%	1/10W
R2701	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	R3320	1-218-686-11	METAL CHIP 560 0.5%	1/10W
R2702	1-216-853-11	METAL CHIP 470K 5%	1/10W	R3321	1-218-686-11	METAL CHIP 560 0.5%	1/10W
R2703	1-216-821-11	METAL CHIP 1K 5%	1/10W	R3323	1-216-809-11	METAL CHIP 100 5%	1/10W
R2704	1-216-825-11	METAL CHIP 2.2K 5%	1/10W	R3324	1-216-809-11	METAL CHIP 100 5%	1/10W
R2705	1-216-853-11	METAL CHIP 470K 5%	1/10W	R3326	1-216-864-11	SHORT CHIP 0	
R3101	1-216-864-11	SHORT CHIP 0		R3329	1-216-864-91	SHORT CHIP 0	
R3103	1-216-817-11	METAL CHIP 470 5%	1/10W	R3330	1-216-864-11	SHORT CHIP 0	
R3104	1-216-817-11	METAL CHIP 470 5%	1/10W	R3331	1-414-594-11	FERRITE 0	
R3105	1-216-817-11	METAL CHIP 470 5%	1/10W	R3332	1-216-864-11	SHORT CHIP 0	
R3106	1-216-842-11	METAL CHIP 56K 5%	1/10W	R3333	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R3107	1-218-725-11	METAL CHIP 24K 0.5%	1/10W	R3335	1-216-864-11	SHORT CHIP 0	
R3108	1-216-864-11	SHORT CHIP 0		R3336	1-216-864-11	SHORT CHIP 0	
R3109	1-216-817-11	METAL CHIP 470 5%	1/10W	R3338	1-216-864-11	SHORT CHIP 0	
R3110	1-216-817-11	METAL CHIP 470 5%	1/10W	R3340	1-216-864-11	SHORT CHIP 0	
R3111	1-216-817-11	METAL CHIP 470 5%	1/10W	R3351	1-216-864-11	SHORT CHIP 0	
R3112	1-216-842-11	METAL CHIP 56K 5%	1/10W	R3400	1-216-809-11	METAL CHIP 100 5%	1/10W
R3113	1-218-725-11	METAL CHIP 24K 0.5%	1/10W	R3401	1-216-809-11	METAL CHIP 100 5%	1/10W
R3121	1-216-817-11	METAL CHIP 470 5%	1/10W	R3402	1-218-827-11	METAL CHIP 150 0.5%	1/10W
R3122	1-216-864-11	SHORT CHIP 0		R3403	1-218-827-11	METAL CHIP 150 0.5%	1/10W
R3123	1-216-817-11	METAL CHIP 470 5%	1/10W	R3405	1-216-817-11	METAL CHIP 470 5%	1/10W
R3124	1-216-817-11	METAL CHIP 470 5%	1/10W	R3406	1-216-819-11	METAL CHIP 680 5%	1/10W
R3125	1-216-842-11	METAL CHIP 56K 5%	1/10W	R3407	1-216-809-11	METAL CHIP 100 5%	1/10W
R3126	1-218-725-11	METAL CHIP 24K 0.5%	1/10W	R3408	1-216-837-11	METAL CHIP 22K 5%	1/10W
R3127	1-216-817-11	METAL CHIP 470 5%	1/10W	R3410	1-216-821-11	METAL CHIP 1K 5%	1/10W
R3128	1-216-864-11	SHORT CHIP 0		R3411	1-216-809-11	METAL CHIP 100 5%	1/10W
R3129	1-216-817-11	METAL CHIP 470 5%	1/10W	R3412	1-216-821-11	METAL CHIP 1K 5%	1/10W
R3130	1-216-817-11	METAL CHIP 470 5%	1/10W	R3413	1-216-835-11	METAL CHIP 15K 5%	1/10W
R3131	1-218-725-11	METAL CHIP 24K 0.5%	1/10W	R3414	1-216-817-11	METAL CHIP 470 5%	1/10W
R3132	1-216-842-11	METAL CHIP 56K 5%	1/10W	R3415	1-216-817-11	METAL CHIP 470 5%	1/10W
R3133	1-216-817-11	METAL CHIP 470 5%	1/10W	R3416	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R3134	1-216-864-11	SHORT CHIP 0		R3417	1-216-864-11	SHORT CHIP 0	
R3135	1-216-817-11	METAL CHIP 470 5%	1/10W	R3419	1-218-827-11	METAL CHIP 150 0.5%	1/10W
R3136	1-216-817-11	METAL CHIP 470 5%	1/10W	R3420	1-216-839-11	METAL CHIP 33K 5%	1/10W
R3137	1-216-842-11	METAL CHIP 56K 5%	1/10W	R3421	1-216-841-11	METAL CHIP 47K 5%	1/10W
R3138	1-218-725-11	METAL CHIP 24K 0.5%	1/10W	R3422	1-216-839-11	METAL CHIP 33K 5%	1/10W
R3143	1-216-864-11	SHORT CHIP 0		R3423	1-216-841-11	METAL CHIP 47K 5%	1/10W
R3144	1-216-864-11	SHORT CHIP 0		R3456	1-216-825-11	METAL CHIP 2.2K 5%	1/10W
R3145	1-216-864-11	SHORT CHIP 0		R3460	1-218-871-11	METAL CHIP 10K 0.5%	1/10W

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

J4 G1

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

G1

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
R3461	1-216-809-11	METAL CHIP	100 5% 1/10W	R3677	1-216-022-00	RES-CHIP	75 5% 1/10W
R3462	1-216-864-11	SHORT CHIP	0	R3678	1-216-805-11	METAL CHIP	47 5% 1/10W
R3463	1-218-871-11	METAL CHIP	10K 0.5% 1/10W	R3679	1-216-022-00	RES-CHIP	75 5% 1/10W
R3500	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3680	1-216-017-91	RES-CHIP	47 5% 1/10W
R3501	1-216-864-11	SHORT CHIP	0	R3681	1-216-843-11	METAL CHIP	68K 5% 1/10W
R3502	1-216-864-11	SHORT CHIP	0	R3682	1-216-838-11	METAL CHIP	27K 5% 1/10W
R3503	1-216-864-11	SHORT CHIP	0	R3700	1-218-285-11	METAL CHIP	75 5% 1/10W
R3504	1-216-864-11	SHORT CHIP	0	R3701	1-216-805-11	METAL CHIP	47 5% 1/10W
R3600	1-216-022-00	RES-CHIP	75 5% 1/10W	R3702	1-216-864-11	SHORT CHIP	0
R3601	1-216-805-11	METAL CHIP	47 5% 1/10W	R3703	1-218-285-11	METAL CHIP	75 5% 1/10W
R3602	1-216-025-11	METAL CHIP	100 5% 1/10W	R3704	1-216-805-11	METAL CHIP	47 5% 1/10W
R3603	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3705	1-216-295-91	SHORT CHIP	0
R3604	1-216-022-00	RES-CHIP	75 5% 1/10W	R3714	1-216-864-11	SHORT CHIP	0
R3605	1-216-805-11	METAL CHIP	47 5% 1/10W	R3716	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3606	1-216-022-00	RES-CHIP	75 5% 1/10W	R3846	1-216-864-11	SHORT CHIP	0
R3607	1-216-805-11	METAL CHIP	47 5% 1/10W	R3847	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3608	1-216-022-00	RES-CHIP	75 5% 1/10W	R3848	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R3609	1-216-805-11	METAL CHIP	47 5% 1/10W	R3849	1-216-845-11	METAL CHIP	100K 5% 1/10W
R3610	1-216-022-00	RES-CHIP	75 5% 1/10W	R3850	1-216-821-11	METAL CHIP	1K 5% 1/10W
R3611	1-216-843-11	METAL CHIP	68K 5% 1/10W	R3851	1-216-841-11	METAL CHIP	47K 5% 1/10W
R3612	1-216-838-11	METAL CHIP	27K 5% 1/10W	R3852	1-216-841-11	METAL CHIP	47K 5% 1/10W
R3613	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R3853	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3614	1-216-022-00	RES-CHIP	75 5% 1/10W	R3854	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3615	1-216-017-91	RES-CHIP	47 5% 1/10W	R3855	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3625	1-216-022-00	RES-CHIP	75 5% 1/10W	R3856	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3626	1-216-805-11	METAL CHIP	47 5% 1/10W	R3857	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3627	1-216-025-11	METAL CHIP	100 5% 1/10W	R3858	1-218-827-11	METAL CHIP	150 0.5% 1/10W
R3628	1-216-833-11	METAL CHIP	10K 5% 1/10W	R3863	1-414-594-11	FERRITE	00H
R3629	1-216-022-00	RES-CHIP	75 5% 1/10W	R3867	1-216-821-11	METAL CHIP	1K 5% 1/10W
R3630	1-216-805-11	METAL CHIP	47 5% 1/10W	R3868	1-216-821-11	METAL CHIP	1K 5% 1/10W
R3631	1-216-022-00	RES-CHIP	75 5% 1/10W	R3869	1-216-821-11	METAL CHIP	1K 5% 1/10W
R3632	1-216-805-11	METAL CHIP	47 5% 1/10W	R3870	1-216-821-11	METAL CHIP	1K 5% 1/10W
R3633	1-216-022-00	RES-CHIP	75 5% 1/10W	R8887	1-216-839-11	METAL CHIP	33K 5% 1/10W
R3634	1-216-805-11	METAL CHIP	47 5% 1/10W	R8890	1-211-985-11	METAL CHIP	47 0.5% 1/10W
R3635	1-216-022-00	RES-CHIP	75 5% 1/10W	R8891	1-218-839-11	METAL CHIP	470 0.5% 1/10W
R3636	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R9053	1-216-839-11	METAL CHIP	33K 5% 1/10W
R3638	1-218-827-11	METAL CHIP	150 0.5% 1/10W	R9089	1-216-797-11	METAL CHIP	10 5% 1/10W
R3639	1-216-022-00	RES-CHIP	75 5% 1/10W	R9090	1-216-797-11	METAL CHIP	10 5% 1/10W
R3640	1-216-017-91	RES-CHIP	47 5% 1/10W	R9091	1-216-864-11	SHORT CHIP	0
R3650	1-216-809-11	METAL CHIP	100 5% 1/10W	R9092	1-216-864-11	SHORT CHIP	0
R3651	1-216-025-11	METAL CHIP	10K 5% 1/10W	* A-1405-505-A G1 Board, Complete			
R3652	1-216-801-11	METAL CHIP	22 5% 1/10W	4-202-373-01	SPRING, IC		
R3653	1-216-022-00	RES-CHIP	75 5% 1/10W	4-382-854-01	SCREW (M3X8), P, SW (+)		
R3654	1-216-805-11	METAL CHIP	47 5% 1/10W	< CAPACITOR >			
R3656	1-216-022-00	RES-CHIP	75 5% 1/10W	C4600 Δ	1-161-964-91	CERAMIC 0.00470F 250V	
R3659	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	C4601 Δ	1-161-964-91	CERAMIC 0.00470F 250V	
R3660	1-216-022-00	RES-CHIP	75 5% 1/10W	C4602	1-165-685-11	ELECT(BLOCK) 820F 20% 450V	
R3661	1-216-017-91	RES-CHIP	47 5% 1/10W	C4603	1-127-568-51	CERAMIC 4700PF 10% 2KV	
R3675	1-216-025-11	METAL CHIP	100 5% 1/10W				
R3676	1-216-833-11	METAL CHIP	10K 5% 1/10W				

REF.NO.	PART.NO	DESCRIPTION	REMARK	REF.NO.	PART.NO	DESCRIPTION	REMARK
C4604	1-126-964-11	ELECT	100F 20.00% 50V	< IC >			
C4605	1-102-228-00	CERAMIC	470PF 10.00% 500V	IC4600	6-700-292-01	IC STR-L474-LP429	
C4606	1-162-318-11	CERAMIC	0.0010F 10.00% 500V	IC4601 Δ	8-749-010-64	PHOTO COUPLER PC123P2	
C4607	1-165-602-91	CERAMIC	220PF 10 2KV	IC4602	6-700-293-01	IC SE-012N-LP4	
C4608	1-107-909-11	ELECT	470F 20.00% 50V	IC4604	8-759-648-19	IC L7809CV/LSY	
C4610	1-130-777-00	MYLAR	0.10F 5.00% 100V	< COIL >			
C4611	1-126-971-11	ELECT	4700F 20.00% 50V	L4600	1-410-397-21	FERRITE	1.10H
C4612	1-136-497-81	FILM	0.10F 5.00% 50V	L4602	1-412-519-11	INDUCTOR	3.30H
C4615	1-136-497-81	FILM	0.10F 5.00% 50V	L4603	1-412-519-11	INDUCTOR	3.30H
C4616	1-104-665-11	ELECT	1000F 20.00% 25V	L4604	1-406-656-21	INDUCTOR	3.30H
C4618	1-136-497-81	FILM	0.10F 5.00% 50V	< PROTECTOR MODULE >			
C4619	1-104-665-11	ELECT	1000F 20.00% 25V	PS4601	1-535-465-11	LEAD, JUMPER (5.0MM)	
C4621	1-136-497-81	FILM	0.10F 5.00% 50V	PS4602	1-535-465-11	LEAD, JUMPER (5.0MM)	
C4622	1-104-665-11	ELECT	1000F 20.00% 25V	PS4603	1-535-465-11	LEAD, JUMPER (5.0MM)	
C4623	1-136-497-81	FILM	0.10F 5.00% 50V	PS4604	1-535-465-11	LEAD, JUMPER (5.0MM)	
C4624	1-126-961-11	ELECT	2.20F 20.00% 50V	< TRANSISTOR >			
C4625	1-115-792-11	ELECT	0.0022F 20.00% 25V	Q4600	8-729-029-56	TRANSISTOR DTA144ESA	
C4626	1-104-665-11	ELECT	1000F 20.00% 25V	Q4601	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C4627	1-136-497-81	FILM	0.10F 5.00% 50V	< RESISTOR >			
C4628	1-115-766-51	ELECT	0.0022F 20.00% 16V	R4600	1-217-155-00	METAL 10% 10% 2W	
C4629	1-137-733-51	ELECT	47000F 20% 25V	R4601	1-260-127-11	CARBON 220K 5% 1/2W	
< CONNECTOR >				R4602 Δ	1-211-371-00	FUSIBLE 0.47 10% 1/1W	
C4600 Δ 1-580-315-11 PLUG, CONNECTOR (POWER)				R4603	1-260-133-11	CARBON 680K 5% 1/2W	
CM4601 * 1-564-506-11 PLUG, CONNECTOR 3P				R4604	1-215-884-21	METAL OXIDE 47 5% 2W	
CM4602 1-764-333-11 PLUG, CONNECTOR (PCB) (V TYPE) 10P				R4605	1-249-401-11	CARBON 47 5% 1/4W	
CM4603 * 1-564-511-11 PLUG, CONNECTOR 8P				R4607	1-249-421-11	CARBON 2.2K 5% 1/4W	
CM4604 1-695-915-11 TAB (CONTACT)				R4608	1-260-128-91	CARBON 270K 5% 1/2W	
CM4605 1-695-915-11 TAB (CONTACT)				R4609	1-249-419-11	CARBON 1.5K 5% 1/4W	
< DIODE >				R4610	1-249-403-11	CARBON 68 5% 1/4W	
D4600	8-719-025-88	DIODE GR04JL-6088		R4611	1-249-418-11	CARBON 1.2K 5% 1/4W	
D4601	8-719-080-26	DIODE SARSO1V0		R4612	1-249-419-11	CARBON 1.5K 5% 1/4W	
D4602	8-719-075-11	DIODE AG01V0		R4613	1-259-880-11	CARBON 2.2M 5% 1/4W	
D4603	8-719-075-11	DIODE AG01V0		R4614	1-249-417-11	CARBON 1K 5% 1/4W	
D4604	8-719-075-11	DIODE AG01V0		R4615	1-249-425-11	CARBON 4.7K 5% 1/4W	
D4605	8-719-075-11	DIODE AG01V0		R4616	1-216-366-00	METAL OXIDE 0.56 5% 2W	
D4606	8-719-072-17	DIODE BYW100-200RL		R4617	1-249-415-11	CARBON 680 5% 1/4W	
D4607	8-719-085-10	DIODE PNB-24LP654		R4618	1-249-420-11	CARBON 1.8K 5% 1/4W	
D4608	8-719-312-10	DIODE R04AM-T3		< RELAY >			
D4609	8-719-510-12	DIODE D10SC4M		RY4601 Δ	1-755-389-11	RELAY (AC POWER)	
D4611	8-719-991-33	DIODE 1SS133T-77		< TRANSFORMER >			
D4612	8-719-063-70	DIODE D1NL20U		T4601 Δ	1-437-445-21	TRANSFORMER, CONVERTER (SRT)	

SF

REF.NO.	PART.NO.	DESCRIPTION	REMARK
		* A-1410-377-A	SF Board, Complete (KV-32HQ100)
		* A-1405-506-A	SF Board, Complete (KV-36HQ100)

SF Board, Common Parts

4-382-854-01	SCREW (M3X8), P, SW (+)		
< CAPACITOR >			
C5205	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C5207	1-126-960-11	ELECT 1UF	20.00% 50V
C5209	1-126-964-11	ELECT 10UF	20.00% 50V
C5211	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C5212	1-162-923-11	CERAMIC CHIP 47PF	5.00% 50V
C5213	1-126-964-11	ELECT 10UF	20.00% 50V
C5214	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C5216	1-117-722-91	ELECT 2200UF	20.00% 10V
C5239	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C5240	1-164-156-11	CERAMIC CHIP 0.1UF	25V
C5502	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5503	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C5504	1-165-176-11	CERAMIC CHIP 0.047UF	10.00% 16V
C5505	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5506	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C5507	1-104-665-11	ELECT 100UF	20.00% 25V
C5508	1-136-497-81	FILM 0.1UF	5.00% 50V
C5510	1-104-665-11	ELECT 100UF	20.00% 25V
C5512	1-136-497-81	FILM 0.1UF	5.00% 50V
C5517	1-162-964-11	CERAMIC CHIP 0.001UF	10.00% 50V
C5518	1-136-497-81	FILM 0.1UF	5.00% 50V
C5520	1-136-497-81	FILM 0.1UF	5.00% 50V
C5521	1-104-665-11	ELECT 100UF	20.00% 25V
C5522	1-104-665-11	ELECT 100UF	20.00% 25V
C5523	1-126-935-11	ELECT 470UF	20.00% 16V
C5524	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5525	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5526	1-126-935-11	ELECT 470UF	20.00% 16V
C5527	1-126-964-11	ELECT 10UF	20.00% 50V
C5528	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5529	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5530	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5531	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5532	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5533	1-126-963-11	ELECT 4.7UF	20.00% 50V
C5534	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5535	1-126-960-11	ELECT 1UF	20.00% 50V
C5536	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5537	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5538	1-126-964-11	ELECT 10UF	20.00% 50V
C5539	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5540	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V

REF.NO.	PART.NO.	DESCRIPTION	REMARK
C5541	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5547	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5548	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5549	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5551	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5554	1-107-826-11	CERAMIC CHIP 0.1UF	10.00% 16V
C5555	1-136-497-81	FILM 0.1UF	5.00% 50V
C5556	1-136-497-81	FILM 0.1UF	5.00% 50V
< CONNECTOR >			
CN5500	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN5501	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN5505	* 1-564-509-11	PLUG, CONNECTOR 6P	
CN5507	1-564-505-41	PLUG, CONNECTOR 2P	
CN5508	* 1-564-515-11	PLUG, CONNECTOR 12P	
CN5509	* 1-564-506-11	PLUG, CONNECTOR 3P	
< DIODE >			
D5200	8-719-081-97	DIODE MMDL914TI	
D5201	8-719-081-97	DIODE MMDL914TI	
< IC >			
IC5200	8-759-700-78	IC NJM082M	
IC5205	8-759-100-96	IC UPC4558G2	
IC5501	8-759-822-38	IC LA6510	
IC5502	8-759-803-42	IC LA6500-FA	
IC5503	8-759-445-59	IC BA033T	
IC5504	6-803-081-01	IC CXD9761Q	
IC5505	6-702-455-01	IC NJM12903M-TE2	
< RESISTOR >			
R5202	1-216-815-11	METAL CHIP 330 5% 1/10W	
R5203	1-216-815-11	METAL CHIP 330 5% 1/10W	
R5204	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5208	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5210	1-218-913-91	METAL CHIP 560K 0.5% 1/10W	
R5217	1-249-383-11	CARBON 1.5 5% 1/4W	
R5224	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R5225	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R5229	1-249-383-11	CARBON 1.5 5% 1/4W	
R5231	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R5232	1-218-901-11	METAL CHIP 180K 0.5% 1/10W	
R5234	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5256	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R5258	1-218-878-11	METAL CHIP 20K 0.5% 1/10W	
R5500	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R5503	1-218-878-11	METAL CHIP 20K 0.5% 1/10W	
R5504	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R5506	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	

REF.NO.	PART.NO.	DESCRIPTION	REMARK
R5507	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R5508	1-218-878-11	METAL CHIP 20K 0.5% 1/10W	
R5510	1-218-878-11	METAL CHIP 20K 0.5% 1/10W	
R5513	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R5514	1-218-871-11	METAL CHIP 10K 0.5% 1/10W	
R5516	1-216-793-11	METAL CHIP 4.7 5% 1/10W	
R5517	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R5519	1-216-793-11	METAL CHIP 4.7 5% 1/10W	
R5520	1-218-882-11	METAL CHIP 30K 0.5% 1/10W	
R5521	1-216-851-11	METAL CHIP 330K 5% 1/10W	
R5522	1-249-383-11	CARBON 1.5 5% 1/4W	
R5523	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R5526	1-215-869-11	METAL OXIDE 1K 5% 1W	
R5527	1-249-383-11	CARBON 1.5 5% 1/4W	
R5528	1-243-831-91	METAL OXIDE 12 5% 1W	
R5530	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R5531	1-249-383-11	CARBON 1.5 5% 1/4W	
R5532	1-218-883-11	METAL CHIP 33K 0.5% 1/10W	
R5535	1-216-793-11	METAL CHIP 4.7 5% 1/10W	
R5536	1-249-383-11	CARBON 1.5 5% 1/4W	
R5538	1-216-793-11	METAL CHIP 4.7 5% 1/10W	
R5539	1-249-441-11	CARBON 100K 5% 1/4W	
R5541	1-216-851-11	METAL CHIP 330K 5% 1/10W	
R5542	1-215-857-11	METAL OXIDE 10 5% 1W	
R5543	1-249-383-11	CARBON 1.5 5% 1/4W	
R5544	1-218-883-11	METAL CHIP 33K 0.5% 1/10W	
R5545	1-243-831-91	METAL OXIDE 12 5% 1W	
R5546	1-215-869-11	METAL OXIDE 1K 5% 1W	
R5547	1-249-383-11	CARBON 1.5 5% 1/4W	
R5548	1-249-383-11	CARBON 1.5 5% 1/4W	
R5550	1-216-864-11	SHORT CHIP 0	
R5551	1-218-823-11	METAL CHIP 100 0.5% 1/10W	
R5552	1-218-823-11	METAL CHIP 100 0.5% 1/10W	
R5553	1-211-976-11	METAL CHIP 20 0.5% 1/10W	
R5554	1-218-823-11	METAL CHIP 100 0.5% 1/10W	
R5555	1-216-864-11	SHORT CHIP 0	
R5556	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5557	1-218-867-11	METAL CHIP 6.8K 0.5% 1/10W	
R5558	1-218-823-11	METAL CHIP 100 0.5% 1/10W	
R5559	1-211-986-11	METAL CHIP 51 0.5% 1/10W	
R5560	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5561	1-211-986-11	METAL CHIP 51 0.5% 1/10W	
R5562	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R5563	1-216-797-11	METAL CHIP 10 5% 1/10W	
R5564	1-218-831-11	METAL CHIP 220 0.5% 1/10W	
R5565	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5566	1-218-859-11	METAL CHIP 3.3K 0.5% 1/10W	
R5567	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5572	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5574	1-216-833-11	METAL CHIP 10K 5% 1/10W	

SF

REF.NO.	PART.NO.	DESCRIPTION	REMARK
R5575	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5576	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5577	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5578	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5580	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5581	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5584	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R5587	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R5591	1-211-985-11	METAL CHIP 47 0.5% 1/10W	
R5592	1-211-985-11	METAL CHIP 47 0.5% 1/10W	

SF Board, Variant Parts KV-32HQ100

< CAPACITOR >

C5200	NOT FITTED
C5201	NOT FITTED
C5202	NOT FITTED
C5203	NOT FITTED
C5204	NOT FITTED
C5206	NOT FITTED
C5208	NOT FITTED
C5210	NOT FITTED
C5215	NOT FITTED
C5237	NOT FITTED
C5238	NOT FITTED
C5280	NOT FITTED
C5281	NOT FITTED
C5282	NOT FITTED
C5283	NOT FITTED
C5284	NOT FITTED

< CONNECTOR >

CN5200	NOT FITTED
CN5280	NOT FITTED

< IC >

IC5201	NOT FITTED
IC5280	NOT FITTED

< RESISTOR >

R5200	NOT FITTED
R5201	NOT FITTED
R5205	NOT FITTED
R5206	NOT FITTED
R5207	NOT FITTED
R5209	NOT FITTED
R5211	NOT FITTED
R5212	NOT FITTED
R5213	NOT FITTED
R5214	NOT FITTED

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R5215	NOT FITTED			< CONNECTOR >			
R5216	NOT FITTED			CNS200	* 1-564-507-11	PLUG, CONNECTOR 4P	
R5218	NOT FITTED			CNS280	* 1-564-506-11	PLUG, CONNECTOR 3P	
R5219	NOT FITTED			< IC >			
R5220	NOT FITTED			ICS201	8-749-018-54	IC STK391-120	
R5230	1-218-915-11	METAL CHIP	680K 0.5% 1/10W	ICS280	8-749-018-54	IC STK391-120	
R5233	NOT FITTED			< RESISTOR >			
R5254	NOT FITTED			R5200	1-218-865-11	METAL CHIP	5.6K 0.5% 1/10W
R5255	NOT FITTED			R5201	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R5257	NOT FITTED			R5205	1-249-383-11	CARBON	1.5 5% 1/4W
R5259	NOT FITTED			R5206	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
R5260	NOT FITTED			R5207	1-243-693-71	METAL OXIDE	270 5% 1W
R5261	NOT FITTED			R5209	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
R5262	NOT FITTED			R5211	1-243-546-71	METAL OXIDE	3.3 5% 2W
R5263	NOT FITTED			R5212	1-249-383-11	CARBON	1.5 5% 1/4W
R5264	NOT FITTED			R5213	1-243-693-71	METAL OXIDE	270 5% 1W
R5280	NOT FITTED			R5214	1-216-843-11	METAL CHIP	68K 5% 1/10W
R5281	NOT FITTED			R5215	1-243-546-71	METAL OXIDE	3.3 5% 2W
R5282	NOT FITTED			R5216	1-249-381-11	CARBON	1 5% 1/4W
R5283	NOT FITTED			R5218	1-218-865-11	METAL CHIP	5.6K 0.5% 1/10W
R5284	NOT FITTED			R5219	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R5285	NOT FITTED			R5220	1-249-381-11	CARBON	1 5% 1/4W
R5286	NOT FITTED			R5230	1-216-857-11	METAL CHIP	1M 5% 1/10W
R5287	NOT FITTED			R5233	1-218-888-91	RES CHIP	51K 0.5% 1/10W
R5288	NOT FITTED			R5254	1-218-858-11	METAL CHIP	3K 0.5% 1/10W
R5289	NOT FITTED			R5255	1-218-858-11	METAL CHIP	3K 0.5% 1/10W
R5290	NOT FITTED			R5257	1-218-871-91	RES CHIP	10K 0.5% 1/10W
R5291	NOT FITTED			R5259	1-218-863-91	RES CHIP	4.7K 0.5% 1/10W
R5292	NOT FITTED			R5260	1-218-871-91	RES CHIP	10K 0.5% 1/10W
SF Board, Variant Parts KV-36HQ100				R5261	1-218-859-11	METAL CHIP	3.3K 0.5% 1/10W
< CAPACITOR >				R5262	1-218-834-11	METAL CHIP	300 0.5% 1/10W
C5200	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V	R5263	1-218-859-11	METAL CHIP	3.3K 0.5% 1/10W
C5201	1-162-923-11	CERAMIC CHIP	47PF 5.00% 50V	R5264	1-218-834-11	METAL CHIP	300 0.5% 1/10W
C5202	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V	R5280	1-218-858-11	METAL CHIP	3K 0.5% 1/10W
C5203	1-162-923-11	CERAMIC CHIP	47PF 5.00% 50V	R5281	1-218-859-11	METAL CHIP	3.3K 0.5% 1/10W
C5204	1-104-665-11	ELECT	100UF 20.00% 25V	R5282	1-218-834-11	METAL CHIP	300 0.5% 1/10W
C5206	1-104-665-11	ELECT	100UF 20.00% 25V	R5283	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
C5208	1-164-156-11	CERAMIC CHIP	0.1UF 25V	R5284	1-216-822-11	METAL CHIP	1.2K 5% 1/10W
C5210	1-164-156-11	CERAMIC CHIP	0.1UF 25V	R5285	1-249-383-11	CARBON	1.5 5% 1/4W
C5215	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	R5286	1-218-865-11	METAL CHIP	5.6K 0.5% 1/10W
C5237	1-162-967-11	CERAMIC CHIP	0.0033UF 10.00% 50V	R5287	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
C5238	1-162-967-11	CERAMIC CHIP	0.0033UF 10.00% 50V	R5288	1-216-843-11	METAL CHIP	68K 5% 1/10W
C5280	1-162-967-11	CERAMIC CHIP	0.0033UF 10.00% 50V	R5289	1-243-693-71	METAL OXIDE	270 5% 1W
C5281	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V	R5290	1-249-381-11	CARBON	1 5% 1/4W
C5282	1-162-923-11	CERAMIC CHIP	47PF 5.00% 50V	R5291	1-243-546-71	METAL OXIDE	3.3 5% 2W
C5283	1-104-665-11	ELECT	100UF 20.00% 25V	R5292	1-249-381-11	CARBON	1 5% 1/4W
C5284	1-104-665-11	ELECT	100UF 20.00% 25V				

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
* A-1405-666-A SF2 Board, Complete				C8803	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
< CONNECTOR >				C8804	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V
< THERMISTOR >				C8809	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
CN5500	*1-564-506-11	PLUG, CONNECTOR 3P		C8810	1-126-947-11	ELECT	47UF 20.00% 35V
< THERMISTOR >				C8811	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
TH5501	1-807-796-11	THERMISTOR		C8812	1-126-960-11	ELECT	1UF 20.00% 50V
* A-1405-539-A D1 Board, Complete 32HQ100				C8817	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
* A-1405-507-A D1 Board, Complete 36HQ100				C8820	1-164-227-11	CERAMIC CHIP	0.022UF 10.00% 25V
D1 Board, Common Parts				C8821	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V
4-382-854-01 SCREW (M3X8), P, SW (+)				C8822	1-136-479-11	FILM	0.001UF 5.00% 100V
< CAPACITOR >				C8823	1-162-964-11	CERAMIC CHIP	0.001UF 5.00% 50V
C8100	1-126-960-11	ELECT	1UF 20.00% 50V	C8824	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
C8101	1-162-962-11	CERAMIC CHIP	470PF 10.00% 50V	C8825	1-126-960-11	ELECT	1UF 20.00% 50V
C8102	1-102-030-00	CERAMIC	330PF 10.00% 500V	< CONNECTOR >			
C8104	1-106-383-00	MYLAR	0.047UF 10.00% 200V	CN8500	1-764-333-11	PIN, CONNECTOR(PCB) (V TYPE)10P	
C8105	1-126-960-11	ELECT	1UF 20.00% 50V	CN8601	* 1-564-506-11	PLUG, CONNECTOR 3P	
C8106	1-162-962-11	CERAMIC CHIP	470PF 10.00% 50V	CN8611	* 1-785-270-12	PIN, DY CONNECTOR (PC BOARD)	
C8107	1-102-030-00	CERAMIC	330PF 10.00% 500V	CN8612	* 1-564-511-11	PLUG, CONNECTOR 8P	
C8109	1-106-383-00	MYLAR	0.047UF 10.00% 200V	CN8614	* 1-564-508-11	PLUG, CONNECTOR 5P	
C8112	1-117-836-11	FILM	6800PF 3.00% 1.5KV	CN8615	* 1-564-509-11	PLUG, CONNECTOR 6P	
C8113	1-117-835-11	FILM	6200PF 3.00% 1.5KV	CN8616	* 1-564-510-11	PLUG, CONNECTOR 7P	
C8114	1-125-893-11	FILM	680PF 3.00% 1.5KV	< DIODE >			
C8115	1-125-893-11	FILM	680PF 3.00% 1.5KV	D8100	8-719-991-33	DIODE 1SS133T-77	
C8116	1-127-681-11	FILM	10000PF 2% 100V	D8101	8-719-110-41	DIODE RD15SEB2	
C8117	1-115-519-11	FILM	0.56UF 5.00% 250V	D8102	8-719-110-41	DIODE RD15SEB2	
C8118	1-107-846-11	FILM	0.1UF 5.00% 400V	D8201	8-719-302-43	DIODE EL12	
C8120	1-117-662-11	FILM	0.18UF 5.00% 250V	D8202	8-719-302-43	DIODE EL12	
C8121	1-107-846-11	FILM	0.1UF 5.00% 400V	D8203	8-719-510-73	DIODE S3L20UF4	
C8122	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	D8204	8-719-510-73	DIODE S3L20UF4	
C8200	1-123-024-21	ELECT	33UF 160V	D8309	8-719-081-97	DIODE MMDL914T1	
C8201	1-107-656-11	ELECT	100UF 20.00% 250V	D8311	8-719-081-97	DIODE MMDL914T1	
C8202	1-102-228-00	CERAMIC	470PF 10.00% 500V	D8312	8-719-081-97	DIODE MMDL914T1	
C8203	1-102-228-00	CERAMIC	470PF 10.00% 500V	D8313	8-719-081-97	DIODE MMDL914T1	
C8204	1-102-228-00	CERAMIC	470PF 10.00% 500V	D8802	8-719-081-97	DIODE MMDL914T1	
C8205	1-126-941-11	ELECT	470UF 20.00% 25V	D8804	8-719-081-97	DIODE MMDL914T1	
C8206	1-126-941-11	ELECT	470UF 20.00% 25V	D8805	8-719-081-97	DIODE MMDL914T1	
C8304	1-104-666-11	ELECT	220UF 20.00% 25V	< IC >			
C8305	1-164-156-11	CERAMIC CHIP	0.1UF 25V	IC8501	8-759-998-98	IC LM358D	
C8313	1-115-416-11	CERAMIC CHIP	0.001UF 5.00% 25V	IC8801	6-701-847-01	IC UPCI898CT-A	
C8314	1-162-927-11	CERAMIC CHIP	100PF 5.00% 50V	< COIL >			
C8501	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V	L8101	1-406-985-11	INDUCTOR	2.2MH
C8502	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	L8201	1-535-303-00	LEAD, JUMPER (5.0MM)	
C8503	1-162-970-11	CERAMIC CHIP	0.01UF 10.00% 25V	L8202	1-535-303-00	LEAD, JUMPER (5.0MM)	
C8506	1-126-947-11	ELECT	47UF 20.00% 35V	L8203	1-535-303-00	LEAD, JUMPER (5.0MM)	
C8507	1-165-176-11	CERAMIC CHIP	0.047UF 10.00% 16V				
C8802	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V				

D1

D1

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
< TRANSISTOR >				R8226	1-260-288-11	CARBON	0.47 5% 1/2W
Q8010	8-729-010-29	TRANSISTOR MSD601-RST1		R8308	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q8011	8-729-010-05	TRANSISTOR MSB709-RT1		R8309	1-216-841-11	METAL CHIP	47K 5% 1/10W
Q8014	8-729-010-29	TRANSISTOR MSD601-RST1		R8317	1-215-475-00	METAL	150K 1% 1/4W
Q8015	8-729-010-05	TRANSISTOR MSB709-RT1		R8318	1-215-461-00	METAL	47K 1% 1/4W
Q8100	8-729-048-47	TRANSISTOR 2SC2688(5)-LK		R8319	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
Q8101	8-729-048-47	TRANSISTOR 2SC2688(5)-LK		R8320	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q8102	6-550-669-01	TRANSISTOR ST2310DHI		R8321	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q8103	6-550-669-01	TRANSISTOR ST2310DHI		R8327	1-218-883-11	METAL CHIP	33K 0.5% 1/10W
Q8105	8-729-050-48	TRANSISTOR IAF614-005		R8331	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
Q8308	8-729-010-05	TRANSISTOR MSB709-RT1		R8332	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q8501	8-729-010-05	TRANSISTOR MSB709-RT1		R8333	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q8502	8-729-010-29	TRANSISTOR MSD601-RST1		R8334	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
Q8503	8-729-010-29	TRANSISTOR MSD601-RST1		R8336	1-215-469-00	METAL	100K 1% 1/4W
Q8504	8-729-010-05	TRANSISTOR MSB709-RT1		R8363	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W
Q8507	8-729-010-29	TRANSISTOR MSD601-RST1		R8364	1-218-861-11	METAL CHIP	3.9K 0.5% 1/10W
Q8508	8-729-010-05	TRANSISTOR MSB709-RT1		R8501	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
Q8701	8-729-010-29	TRANSISTOR MSD601-RST1		R8503	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q8801	8-729-010-05	TRANSISTOR MSB709-RT1		R8504	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
Q8802	8-729-010-29	TRANSISTOR MSD601-RST1		R8505	1-216-833-11	METAL CHIP	10K 5% 1/10W
Q8806	8-729-010-29	TRANSISTOR MSD601-RST1		R8506	1-216-845-11	METAL CHIP	100K 5% 1/10W
Q8807	8-729-010-05	TRANSISTOR MSB709-RT1		R8508	1-216-864-11	SHORT CHIP	0
Q8808	8-729-421-19	TRANSISTOR UM2213		R8509	1-216-864-11	SHORT CHIP	0
Q8809	8-729-010-29	TRANSISTOR MSD601-RST1		R8510	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q8810	8-729-010-29	TRANSISTOR MSD601-RST1		R8512	1-216-845-11	METAL CHIP	100K 5% 1/10W
< RESISTOR >				R8513	1-216-821-11	METAL CHIP	1K 5% 1/10W
R8028	1-249-411-11	CARBON	330 5% 1/4W	R8518	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
R8033	1-249-411-11	CARBON	330 5% 1/4W	R8701	1-215-469-00	METAL	100K 1% 1/4W
R8100	1-243-584-71	METAL OXIDE	4.7K 5% 2W	R8702	1-216-833-11	METAL CHIP	10K 5% 1/10W
R8102	1-249-419-11	CARBON	1.5K 5% 1/4W	R8703	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R8103	1-260-340-11	CARBON	10K 5% 1/2W	R8802	1-216-864-11	SHORT CHIP	0
R8105	1-243-613-71	METAL OXIDE	3.9K 5% 3W	R8803	1-218-887-11	METAL CHIP	47K 0.5% 1/10W
R8107	1-249-419-11	CARBON	1.5K 5% 1/4W	R8804	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R8108	1-260-340-11	CARBON	10K 5% 1/2W	R8805	1-216-833-11	METAL CHIP	10K 5% 1/10W
R8109	1-243-949-71	METAL OXIDE	0.47 5% 2W	R8810	1-216-845-11	METAL CHIP	100K 5% 1/10W
R8110	1-215-880-00	METAL OXIDE	10 5% 2W	R8811	1-216-845-11	METAL CHIP	100K 5% 1/10W
R8111	1-216-361-21	METAL OXIDE	0.22 5% 2W	R8812	1-216-864-11	SHORT CHIP	0
R8112	1-215-880-00	METAL OXIDE	10 5% 2W	R8823	1-216-839-11	METAL CHIP	33K 5% 1/10W
R8115	1-215-493-00	METAL	1M 1% 1/4W	R8824	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R8116	1-215-485-00	METAL	470K 1% 1/4W	R8829	1-216-809-11	METAL CHIP	100 5% 1/10W
R8117	1-215-493-00	METAL	1M 1% 1/4W	R8831	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R8119	1-249-405-11	CARBON	100 5% 1/4W	R8832	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R8120	1-249-425-11	CARBON	4.7K 5% 1/4W	R8833	1-218-879-11	METAL CHIP	22K 0.5% 1/10W
R8121	1-249-425-11	CARBON	4.7K 5% 1/4W	R8834	1-215-469-00	METAL	100K 1% 1/4W
R8201	1-260-123-11	CARBON	100K 5% 1/2W	R8835	1-216-833-11	METAL CHIP	10K 5% 1/10W
R8202	1-212-934-00	FUSIBLE	1 5% 1/2W	R8836	1-216-833-11	METAL CHIP	10K 5% 1/10W
R8206	1-260-288-11	CARBON	0.47 5% 1/2W	R8837	1-216-837-11	METAL CHIP	22K 5% 1/10W
R8207	1-260-288-11	CARBON	0.47 5% 1/2W	R8842	1-218-869-11	METAL CHIP	8.2K 0.5% 1/10W
				R8843	1-216-815-11	METAL CHIP	330 5% 1/10W
				R8844	1-215-469-00	METAL	100K 1% 1/4W

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
< TRANSISTOR >				R8845	1-215-469-00	METAL	100K 1% 1/4W
R8848	1-216-845-11	METAL CHIP	100K 5% 1/10W	R8848	1-216-845-11	METAL CHIP	100K 5% 1/10W
R8849	1-216-845-11	METAL CHIP	100K 5% 1/10W	R8851	1-216-833-11	METAL CHIP	10K 5% 1/10W
R8853	1-216-857-11	METAL CHIP	1M 5% 1/10W	R8853	1-216-857-11	METAL CHIP	1M 5% 1/10W
R8854	1-216-837-11	METAL CHIP	22K 5% 1/10W	R8854	1-216-837-11	METAL CHIP	22K 5% 1/10W
R8855	1-216-864-11	SHORT CHIP	0	R8855	1-216-864-11	SHORT CHIP	0
R8856	1-216-837-11	METAL CHIP	22K 5% 1/10W	R8856	1-216-837-11	METAL CHIP	22K 5% 1/10W
R8857	1-216-841-11	METAL CHIP	47K 5% 1/10W	R8857	1-216-841-11	METAL CHIP	47K 5% 1/10W
R8858	1-216-845-11	METAL CHIP	100K 5% 1/10W	R8858	1-216-845-11	METAL CHIP	100K 5% 1/10W
R8861	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R8861	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R8862	1-216-833-11	METAL CHIP	10K 5% 1/10W	R8862	1-216-833-11	METAL CHIP	10K 5% 1/10W
R8863	1-216-864-11	SHORT CHIP	0	R8863	1-216-864-11	SHORT CHIP	0
< TRANSFORMER >				T8100	1-433-489-31	TRANSFORMER, FERRITE (EDT)	
T8101	1-433-489-31	TRANSFORMER, FERRITE (EDT)		T8101	1-433-489-31	TRANSFORMER, FERRITE (EDT)	
T8202	1-437-614-11	TRANSFORMER, HORIZONTAL OUTPUT		T8202	1-437-614-11	TRANSFORMER, HORIZONTAL OUTPUT	
D1 Board, Variant Parts KV-32HQ100				< CAPACITOR >			
C8110	1-162-131-11	CERAMIC	220PF 10.00% 2KV	C8110	1-162-131-11	CERAMIC	220PF 10.00% 2KV
C8111	1-162-116-00	CERAMIC	680PF 10.00% 2KV	C8111	1-162-116-00	CERAMIC	680PF 10.00% 2KV
C8119	1-117-662-11	FILM	0.18UF 5.00% 250V	C8119	1-117-662-11	FILM	0.18UF 5.00% 250V
C8208	NOT FITTED			C8208	NOT FITTED		
C8209	NOT FITTED			C8209	NOT FITTED		
C8402	NOT FITTED			C8402	NOT FITTED		
C8403	NOT FITTED			C8403	NOT FITTED		
C8404	NOT FITTED			C8404	NOT FITTED		
C8504	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V	C8504	1-162-966-11	CERAMIC CHIP	0.0022UF 10.00% 50V
C8607	NOT FITTED			C8607	NOT FITTED		
C8815	NOT FITTED			C8815	NOT FITTED		
< DIODE >				D8205	NOT FITTED		
D8206	NOT FITTED			D8206	NOT FITTED		
D8401	NOT FITTED			D8401	NOT FITTED		
D8402	NOT FITTED			D8402	NOT FITTED		
D8603	NOT FITTED			D8603	NOT FITTED		
D8604	NOT FITTED			D8604	NOT FITTED		
D8807	NOT FITTED			D8807	NOT FITTED		
< COIL >				L8401	NOT FITTED		
< PROTECTOR MODULE >				PS8401	NOT FITTED		

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
< TRANSISTOR >				Q8106	8-729-047-59	TRANSISTOR STP5NB40FP	
Q8201	NOT FITTED			Q8201	NOT FITTED		
Q8401	NOT FITTED			Q8401	NOT FITTED		
Q8405	NOT FITTED			Q8405	NOT FITTED		
Q8406	NOT FITTED			Q8406	NOT FITTED		
Q8509	NOT FITTED			Q8509	NOT FITTED		
Q8510	NOT FITTED			Q8510	NOT FITTED		
Q8601	NOT FITTED			Q8601	NOT FITTED		
< RESISTOR >				R8101	1-216-460-71	METAL OXIDE	3.9K 5% 2W
R8104	1-243-614-71	METAL OXIDE	4.7K 5% 3W	R8104	1-243-614-71	METAL OXIDE	4.7K 5% 3W
R8113	NOT FITTED			R8113	NOT FITTED		
R8114	NOT FITTED			R8114	NOT FITTED		
R8118	1-247-807-31	CARBON	100 5% 1/4W	R8118	1-247-807-31	CARBON	100 5% 1/4W
R8213	NOT FITTED			R8213	NOT FITTED		
R8214	1-216-367-11	METAL OXIDE	0.68 5% 2W	R8214	1-216-367-11	METAL OXIDE	0.68 5% 2W
R8215	NOT FITTED			R8215	NOT FITTED		
R8216	NOT FITTED			R8216	NOT FITTED		
R8217	NOT FITTED			R8217	NOT FITTED		
R8218	NOT FITTED			R8218	NOT FITTED		
R8219	NOT FITTED			R8219	NOT FITTED		
R8220	NOT FITTED			R8220	NOT FITTED		
R8221	NOT FITTED			R8221	NOT FITTED		
R8222	NOT FITTED			R8222	NOT FITTED		
R8223	NOT FITTED			R8223	NOT FITTED		
R8335	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W	R8335	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W
R8345	NOT FITTED			R8345	NOT FITTED		
R8347	NOT FITTED			R8347	NOT FITTED		
R8404	NOT FITTED			R8404	NOT FITTED		
R8514	NOT FITTED			R8514	NOT FITTED		
R8515	NOT FITTED			R8515	NOT FITTED		
R8516	NOT FITTED			R8516	NOT FITTED		
R8517	1-216-821-11	METAL CHIP	1K 5% 1/10W	R8517	1-216-821-11	METAL CHIP	1K 5% 1/10W
R8606	NOT FITTED			R8606	NOT FITTED		
R8607	NOT FITTED			R8607	NOT FITTED		
R8608	NOT FITTED			R8608	NOT FITTED		
R8609	NOT FITTED			R8609	NOT FITTED		
R8813	NOT FITTED			R8813	NOT FITTED		
R8814	NOT FITTED			R8814	NOT FITTED		
R8815	NOT FITTED			R8815	NOT FITTED		
R8859	NOT FITTED			R8859	NOT FITTED		
R8860	NOT FITTED			R8860	NOT FITTED		
< TRANSFORMER >				T8805	NOT FITTED		

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

D1 D2

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

D2

D1 Board, Variant Parts 36HQ100

< CAPACITOR >

C8110	1-162-134-11	CERAMIC	470PF	10.00%	2KV
C8111	1-104-332-11	CERAMIC	470PF	10.00%	2KV
C8119	1-117-663-11	FILM	0.22UF	5.00%	250V
C8208	1-104-665-11	ELECT	100UF	20.00%	25V
C8209	1-104-665-11	ELECT	100UF	20.00%	25V

C8402	1-130-959-91	FILM	0.047UF	5.00%	400V
C8403	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V
C8404	1-136-177-00	FILM	1UF	5.00%	50V
C8504	1-162-964-11	CERAMIC CHIP	0.001UF	10.00%	50V
C8607	1-126-964-11	ELECT	10UF	20.00%	50V

C8815	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
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< DIODE >

D8205	8-719-081-97	DIODE MMDL914T1			
D8206	8-719-081-97	DIODE MMDL914T1			
D8401	8-719-110-41	DIODE RD15ESB2			
D8402	8-719-991-33	DIODE 1SS133T-77			
D8603	8-719-991-33	DIODE 1SS133T-77			

D8604	8-719-991-33	DIODE 1SS133T-77			
D8807	8-719-988-61	DIODE 1SS355TE-17			

< COIL >

L8401	1-406-987-11	INDUCTOR	4.7mH		
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< PROTECTOR MODULE >

PR8401 Δ 1-130-959-91 P, SW (4)

< TRANSISTOR >

Q8106	8-729-025-19	TRANSISTOR IRF1740G			
Q8201	8-729-019-57	TRANSISTOR 2SA1208S-TP			
Q8401	8-729-025-19	TRANSISTOR IRF1740G			
Q8405	8-729-010-29	TRANSISTOR MSD601-RST1			
Q8406	8-729-010-05	TRANSISTOR MSB709-RT1			

Q8509	8-729-010-29	TRANSISTOR MSD601-RST1			
Q8510	8-729-010-05	TRANSISTOR MSB709-RT1			
Q8601	8-729-010-29	TRANSISTOR MSD601-RST1			

< RESISTOR >

R8101	1-215-895-71	METAL OXIDE	3.3K	5%	2W
R8104	1-215-895-71	METAL OXIDE	3.3K	5%	2W
R8113	1-216-853-11	METAL CHIP	470K	5%	1/10W
R8114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R8118	1-249-401-11	CARBON	47	5%	1/4W

R8213	1-216-371-00	METAL OXIDE	1.5	5%	2W
R8214	1-243-951-71	METAL OXIDE	0.68	5%	2W

R8215	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R8216	1-215-459-00	METAL	39K	1%	1/4W
R8217	1-215-459-00	METAL	39K	1%	1/4W
R8218	1-215-469-00	METAL	100K	1%	1/4W
R8219	1-215-469-00	METAL	100K	1%	1/4W

R8220	1-216-837-11	METAL CHIP	22K	5%	1/10W
R8221	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8222	1-215-469-00	METAL	100K	1%	1/4W
R8223	1-215-469-00	METAL	100K	1%	1/4W
R8335	1-218-869-11	METAL CHIP	8.2K	0.5%	1/10W

R8345	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R8347	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R8404	1-216-805-11	METAL CHIP	47	5%	1/10W
R8514	1-216-833-11	METAL CHIP	10K	5%	1/10W
R8515	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

R8516	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R8517	NOT FITTED				
R8606	1-216-837-11	METAL CHIP	22K	5%	1/10W
R8607	1-216-837-11	METAL CHIP	22K	5%	1/10W
R8608	1-216-845-11	METAL CHIP	100K	5%	1/10W

R8609	1-216-837-11	METAL CHIP	22K	5%	1/10W
R8813	1-216-864-11	SHORT CHIP	0		
R8814	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R8815	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R8859	1-216-833-11	METAL CHIP	10K	5%	1/10W

R8860	1-218-881-11	METAL CHIP	27K	0.5%	1/10W
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< TRANSFORMER >

T8805	1-429-741-11	TRANSFORMER, DRIVE			
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* A-1405-540-A D2 Board, Complete KV-32HQ100

* A-1405-509-A D2 Board, Complete KV-36HQ100

D2 Board, Common Parts

4-382-854-01	SCREW (M3X8), P, SW (4)				
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< CAPACITOR >

C6802	1-130-483-00	MYLAR	0.01UF	5.00%	50V
C6803	1-165-176-11	CERAMIC CHIP	0.047UF	10.00%	16V
C6804	1-136-813-11	FILM	680PF	5.00%	100V
C6805	1-126-964-11	ELECT	10UF	20.00%	50V
C6806	1-104-662-91	ELECT	22UF	20.00%	25V

C6807	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6808	1-126-947-11	ELECT	47UF	20.00%	35V
C6809	1-162-966-11	CERAMIC CHIP	0.0022UF	10.00%	50V
C6810	1-162-115-00	CERAMIC	330PF	10.00%	1KV
C6811	1-162-115-00	CERAMIC	330PF	10.00%	1KV

C6812	1-135-946-22	FILM	47000PF	3%	800V
C6813	1-126-967-11	ELECT	47UF	20.00%	50V

C6814	1-126-947-11	ELECT	47UF	20.00%	35V
C6815	1-130-483-00	MYLAR	0.01UF	5.00%	50V
C6816	1-126-964-11	ELECT	10UF	20.00%	50V
C6820	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6821	1-126-964-11	ELECT	10UF	20.00%	50V

C6822	1-126-966-11	ELECT	33UF	20.00%	50V
C6823	1-126-933-11	ELECT	100UF	20.00%	16V
C6824	1-113-610-11	ELECT (BLOCK)	220UF	20%	250V
C6825	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6826	1-126-969-11	ELECT	220UF	20.00%	50V

C6827	1-137-150-11	FILM	0.01UF	5.00%	100V
C6834	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C6835	1-127-715-91	CERAMIC CHIP	0.22UF	10%	16V
C6836	1-136-497-81	FILM	0.1UF	5.00%	50V
C6837	1-136-103-00	FILM	0.1UF	5.00%	200V

C6840	1-130-495-00	MYLAR	0.1UF	5.00%	50V
C6842	1-130-471-00	MYLAR	0.001UF	5.00%	50V
C6843	1-135-945-22	FILM	10000PF	3%	800V
C6848	1-126-963-11	ELECT	4.7UF	20.00%	50V
C6849	1-162-962-11	CERAMIC CHIP	470PF	10.00%	50V

C6850	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C6851	1-107-826-11	CERAMIC CHIP	0.1UF	10.00%	16V
C6852	1-162-970-11	CERAMIC CHIP	0.01UF	10.00%	25V
C6853	1-126-933-11	ELECT	100UF	20.00%	16V
C8929	1-107-960-11	ELECT	4.7UF	20.00%	250V

C8930	1-136-535-91	FILM	0.0018UF	5.00%	630V
C8932	1-136-205-11	MYLAR	0.022UF	5.00%	630V
C8939	1-162-129-00	CERAMIC	150PF	10.00%	2KV
C8944	1-137-150-11	FILM	0.01UF	5.00%	100V
C8945	1-126-947-11	ELECT	47UF	20.00%	35V

< CONNECTOR >

CN6800	* 1-564-511-11	PLUG, CONNECTOR 8P			
CN6801	* 1-691-772-11	PLUG (MICRO CONNECTOR) 10P			

< DIODE >

D6800	8-719-052-90	DIODE DINL200-TA2			
D6801	8-719-110-41	DIODE RD15ESB2			
D6802	8-719-110-41	DIODE RD15ESB2			
D6803	8-719-911-19	DIODE 1SS119-25			
D6804	8-719-081-97	DIODE MMDL914T1			

D6806	8-719-109-85	DIODE RD5.1ESB2			
D6811	8-719-911-19	DIODE 1SS119-25			
D6813	8-719-911-19	DIODE 1SS119-25			
D6814	8-719-982-21	DIODE MTJ2-30C			
D6815	8-719-911-19	DIODE 1SS119-25			

D6816	8-719-110-41	DIODE RD15ESB2			
D6817	8-719-063-73	DIODE DINL200-TR			
D6820	8-719-921-63	DIODE MTJ2-7.5B			
D6821	8-719-110-49	DIODE RD18ESB2			

D6822	8-719-063-73	DIODE DINL200-TR			
D6823	8-719-911-19	DIODE 1SS119-25			
D6824	8-719-911-19	DIODE 1SS119-25			
D6825	8-719-911-19	DIODE 1SS119-25			
D6828	8-719-911-19	DIODE 1SS119-25			

D8919	8-719-948-45	DIODE ERA22-08			
D8927	8-719-991-33	DIODE 1SS133T-77			

< FERRITE BEAD >

FB6801	1-412-911-11	FERRITE	00H		
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< IC >

IC6801	8-759-700-07	IC NJM2903M			
IC6802	8-759-701-01	IC NJM2904M			
IC6803	8-759-462-09	IC TLV431AIDBV			
IC6807	8-759-586-17	IC TL1431CZ-AP			

< COIL >

L6802	1-419-658-41	INDUCTOR	107uH		
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< TRANSISTOR >

Q6801	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R			
Q6802	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R			
Q6803	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q6804	8-729-044-42	TRANSISTOR IRF1644G-LF36			
Q6805	8-729-044-42	TRANSISTOR IRF1644G-LF36			
Q6807	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q6808	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q6813	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q6814	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q6815	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			

Q6816	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q6817	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX			
Q8909	6-550-012-01	TRANSISTOR STP5NB40 (033Y)			
Q8918	1-801-806-11	TRANSISTOR DTC114EKA			

< RESISTOR >

JR8953	1-216-864-11	SHORT CHIP	0		
R6801	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6802	1-216-849-11	METAL CHIP	220K	5%	1/10W
R6803	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R6805	1-215-481-00	METAL	330K	1%	1/4W
R6806	1-215-481-00	METAL	330K	1%	1/4W
R6807	1-215-481-00	METAL	330K	1%	1/4W
R6808	1-211-981-11	METAL CHIP	33	0.5%	1/10W
R6809	1-218-823-11	METAL CHIP	100	0.5%	1/10W
R6810	1-249-417-11	CARBON	1K	5%	1/4W
R6811	1-202-933-61	FUSIBLE	0.1	10%	1/2W

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

D2

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
R6812	1-218-869-11	METAL CHIP	8.2K 0.5% 1/10W	R8990	1-216-845-11	METAL CHIP	100K 5% 1/10W
R6813	1-249-393-11	CARBON	10 5% 1/4W	R8991	1-216-837-11	METAL CHIP	22K 5% 1/10W
R6814	1-249-393-11	CARBON	10 5% 1/4W	< RESISTOR VARIABLE >			
R6815	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R6816	1-216-833-11	METAL CHIP	10K 5% 1/10W				
R6817	1-243-979-21	METAL OXIDE	0.1 5% 2W	RV6800	1-241-763-11	RES, ADJ, CERMET 4.7K	
R6818	1-249-389-11	CARBON	4.7 5% 1/4W	< SPARK GAP >			
R6820	1-216-837-11	METAL CHIP	22K 5% 1/10W				
R6821	1-216-837-11	METAL CHIP	22K 5% 1/10W	SG6800	1-517-499-21	GAP, SPARK	
R6822	1-216-809-11	METAL CHIP	100 5% 1/10W	< TRANSFORMER >			
R6823	1-247-843-11	CARBON	3.3K 5% 1/4W	PC ASSY IC-54011			
R6828	1-218-895-11	METAL CHIP	100K 0.5% 1/10W	T8901	1-437-690-11	TRANSFORMER, FERRITE (DFT)	
R6829	1-216-841-11	METAL CHIP	47K 5% 1/10W	D2 Board, Variant Parts 32HQ100			
R6832	1-216-841-11	METAL CHIP	47K 5% 1/10W				
R6834	1-216-841-11	METAL CHIP	47K 5% 1/10W	< CAPACITOR >			
R6835	1-215-423-00	METAL	1.2K 1% 1/4W				
R6836	1-215-441-00	METAL	6.8K 1% 1/4W	C8938	NOT FITTED		
R6839	1-215-439-00	METAL	5.6K 1% 1/4W	< IC >			
R6844	1-218-875-11	METAL CHIP	15K 0.5% 1/10W				
R6845	1-218-855-11	METAL CHIP	2.2K 0.5% 1/10W				
R6846	1-218-868-11	METAL CHIP	7.5K 0.5% 1/10W	IC6800	8-759-670-30	IC MCX3001D	
R6847	1-218-847-11	METAL CHIP	1K 0.5% 1/10W	< COIL >			
R6848	1-216-817-11	METAL CHIP	470 5% 1/10W				
R6852	1-216-845-11	METAL CHIP	100K 5% 1/10W				
R6865	1-216-835-11	METAL CHIP	15K 5% 1/10W	L8901	1-406-675-11	INDUCTOR	4.7mH
R6867	1-216-809-11	METAL CHIP	100 5% 1/10W	< RESISTOR >			
R6868	1-216-797-11	METAL CHIP	10 5% 1/10W				
R6869	1-216-833-11	METAL CHIP	10K 5% 1/10W	R6825	1-218-899-11	METAL CHIP	150K 0.5% 1/16W
R6870	1-216-849-11	METAL CHIP	220K 5% 1/10W	R6827	1-218-883-11	METAL CHIP	33K 0.5% 1/10W
R6872	1-249-377-11	CARBON	0.47 5% 1/4W	R6837	1-215-439-00	METAL	5.6K 1% 1/4W
				R6838	1-215-439-00	METAL	5.6K 1% 1/4W
R6873	1-249-431-11	CARBON	15K 5% 1/4W	R6840	1-215-439-00	METAL	5.6K 1% 1/4W
R6874	1-218-903-11	METAL CHIP	220K 0.5% 1/10W				
R6875	1-216-863-11	METAL CHIP	3.3M 5% 1/10W	R6841	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R6876	1-215-485-00	METAL	470K 1% 1/4W	R6843	1-218-845-11	METAL CHIP	820 0.5% 1/10W
R6877	1-215-485-00	METAL	470K 1% 1/4W	R8949	1-243-617-71	METAL OXIDE	8.2K 5% 3W
				R8950	1-243-617-71	METAL OXIDE	8.2K 5% 3W
R6878	1-216-821-11	METAL CHIP	1K 5% 1/10W	R8951	1-243-617-71	METAL OXIDE	8.2K 5% 3W
R6880	1-219-751-51	METAL	47K 5% 1/2W				
R6881	1-219-749-51	METAL	10K 5% 1/2W	R8952	1-243-617-71	METAL OXIDE	8.2K 5% 3W
R6882	1-216-841-11	METAL CHIP	47K 5% 1/10W	R8954	1-260-123-11	METAL OXIDE	100K 5% 1/2W
R6883	1-211-985-11	METAL CHIP	47 0.5% 1/10W	R8955	1-260-123-11	METAL OXIDE	100K 5% 1/2W
				R8956	1-260-123-11	METAL OXIDE	100K 5% 1/2W
R6884	1-218-874-11	METAL CHIP	13K 0.5% 1/10W	R8998	1-243-617-71	METAL OXIDE	8.2K 5% 3W
R6885	1-216-841-11	METAL CHIP	47K 5% 1/10W	< CAPACITOR >			
R6887	1-249-411-11	CARBON	330 5% 1/4W				
R6895	1-216-809-11	METAL CHIP	100 5% 1/10W				
R6896	1-216-839-11	METAL CHIP	33K 5% 1/10W	< IC >			
R6897	1-216-853-11	METAL CHIP	470K 5% 1/10W	C8938	1-162-129-51	CERAMIC	150PF 10.00% 2KV
R6899	1-216-839-11	METAL CHIP	33K 5% 1/10W	< IC >			
R8957	1-218-847-11	METAL CHIP	1K 0.5% 1/10W				
R8988	1-260-123-11	CARBON	100K 5% 1/2W				
R8989	1-249-429-11	CARBON	10K 5% 1/4W	IC6800	8-759-670-30	IC MCX3001D	

D2 Board, Variant Parts 36HQ100

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G

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
< COIL >							
L8901	1-406-674-11	INDUCTOR	3.3mH	C6025	1-164-625-11	CERAMIC	680PF 10.00% 500V
< RESISTOR >				C6026	1-164-625-11	CERAMIC	680PF 10.00% 500V
				C6027	1-164-625-11	CERAMIC	680PF 10.00% 500V
R6825	NOT FITTED			C6028	1-100-197-11	ELECT	15000UF 20% 16V
R6827	1-218-889-11	METAL CHIP	56K 0.5% 1/10W	C6029	1-100-197-11	ELECT	15000UF 20% 16V
R6837	1-215-441-00	METAL	6.8K 1% 1/4W				
R6838	1-215-441-00	METAL	6.8K 1% 1/4W	C6030	1-126-944-11	ELECT	3300UF 20.00% 25V
R6840	1-215-441-00	METAL	6.8K 1% 1/4W	C6031	1-126-944-11	ELECT	3300UF 20.00% 25V
				C6032	1-113-927-11	CERAMIC	0.01UF 250V
R6841	1-218-841-11	METAL CHIP	560 0.5% 1/10W	C6033	1-162-964-11	CERAMIC CHIP	0.001UF 10.00% 50V
R6843	1-218-847-11	METAL CHIP	1K 0.5% 1/10W	C6034	1-162-968-11	CERAMIC CHIP	0.0047UF 10.00% 50V
R8949	1-243-614-71	METAL OXIDE	4.7K 5% 3W				
R8950	1-243-616-71	METAL OXIDE	6.8K 5% 3W	C6035	1-136-497-81	FILM	0.1UF 5.00% 50V
R8951	1-243-614-71	METAL OXIDE	4.7K 5% 3W	C6036	1-136-479-11	FILM	0.001UF 5.00% 100V
				C6037	1-126-947-11	ELECT	47UF 20.00% 35V
R8952	1-243-614-71	METAL OXIDE	4.7K 5% 3W	C6038	1-164-645-11	CERAMIC	1000PF 10.00% 500V
R8954	1-243-719-71	METAL OXIDE	33K 5% 1W	C6039	1-125-891-11	CERAMIC CHIP	0.47UF 10.00% 10V
R8955	1-243-719-71	METAL OXIDE	33K 5% 1W				
R8956	1-243-725-71	METAL OXIDE	100K 5% 1W	C6040	1-115-340-11	CERAMIC CHIP	0.22UF 10.00% 25V
R8998	1-243-614-71	METAL OXIDE	4.7K 5% 3W	C6045	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
				C6102	1-126-943-11	ELECT	2200UF 20.00% 25V
				C6103	1-126-971-11	ELECT	470UF 20.00% 50V
				C6105	1-126-964-11	ELECT	10UF 20.00% 50V
				C6106	1-126-964-11	ELECT	10UF 20.00% 50V
				< CONNECTOR >			
				CN6005	* 1-817-037-61	PLUG CONNECTOR 6P	
				CN6006	* 1-564-516-11	PLUG, CONNECTOR 13P	
				CN6008	1-816-982-71	PLUG, CONNECTOR 5P	
				CN6010	* 1-564-511-11	PLUG, CONNECTOR 8P	
				CN6013	* 1-816-974-51	PLUG, CONNECTOR 3P	
				CN6014	1-695-915-11	TAB (CONTACT)	
				CN6015	1-695-915-11	TAB (CONTACT)	
				< DIODE >			
				D6001	6-500-067-01	DIODE GS1B460L/45	
				D6002	8-719-982-26	DIODE MTJ-33B	
				D6004	8-719-979-64	DIODE UF4005PK23	
				D6008	8-719-063-70	DIODE D1N1200	
				D6009	8-719-110-41	DIODE RD15ESB2	
				D6010	8-719-085-24	DIODE FB104D7M1-B	
				D6011	8-719-033-12	DIODE S3L40P	
				D6012	8-719-033-12	DIODE S3L40P	
				D6014	8-719-083-92	DIODE YG802C09RF122	
				D6015	8-719-085-10	DIODE FMB-24LF654	
				D6016	8-719-312-47	DIODE RBA-406B	
				D6035	8-719-510-02	DIODE D1N54	

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REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
D6036	8-719-081-97	DIODE MMDL914T1		R6008	1-243-979-21	METAL OXIDE 0.1 5% 2W	
D6101	8-719-081-97	DIODE MMDL914T1		R6009	1-216-687-11	METAL CHIP 33K 0.5% 1/10W	
D6102	8-719-511-40	DIODE SILV840		R6010	1-215-481-00	METAL 330K 1% 1/4W	
D6103	8-719-081-97	DIODE MMDL914T1		R6013 Δ 1-216-265-11 METAL 4.7K 5% 1/10W			
D6104	8-719-081-97	DIODE MMDL914T1		R6014	1-243-624-21	METAL OXIDE 33K 5% 3W	
< FERRITE BEAD >				R6015	1-208-757-11	METAL CHIP 91 0.5% 1/10W	
FB6001	1-410-397-21	FERRITE 1.1UH		R6021	1-243-946-21	METAL OXIDE 0.27 5% 2W	
FB6002	1-410-397-21	FERRITE 1.1UH		R6022	1-216-833-11	METAL CHIP 10K 5% 1/10W	
FB6003	1-410-397-21	FERRITE 1.1UH		R6024	1-216-615-11	METAL CHIP 33 0.5% 1/10W	
FB6004	1-410-397-21	FERRITE 1.1UH		R6028	1-249-389-11	CARBON 4.7 5% 1/4W	
< IC >				R6029	1-216-833-11	METAL CHIP 10K 5% 1/10W	
IC6001	8-754-670-30	IC MC13001D		R6030	1-216-817-11	METAL CHIP 470 5% 1/10W	
IC6003	8-749-016-19	IC SX135M-LF4		R6032	1-249-417-11	CARBON 1K 5% 1/4W	
< COIL >				R6033	1-215-481-00	METAL 330K 1% 1/4W	
L6001	1-406-663-21	INDUCTOR 47UH		R6035	1-260-083-11	CARBON 47 5% 1/2W	
L6002	1-412-521-31	INDUCTOR 4.7UH		R6036	1-216-817-11	METAL CHIP 470 5% 1/10W	
L6003	1-412-521-31	INDUCTOR 4.7UH		R6037	1-249-405-11	CARBON 100 5% 1/4W	
L6006	1-406-659-11	INDUCTOR 10UH		R6038	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	
L6007	1-412-525-31	INDUCTOR 10UH		R6039	1-208-830-11	METAL CHIP 100K 0.5% 1/10W	
L6008	1-406-670-11	INDUCTOR 680UH		R6040	1-208-814-91	METAL CHIP 22K 0.5% 1/10W	
< PHOTOCOUPLER >				R6042	1-216-295-91	SHORT CHIP 0	
FB6001 Δ 1-410-397-21 FERRITE 1.1UH				R6045	1-216-639-11	METAL CHIP 330 0.5% 1/10W	
< TRANSISTOR >				R6047	1-216-681-11	METAL CHIP 18K 0.5% 1/10W	
Q6003	8-729-010-29	TRANSISTOR MSD601-RST1		R6048	1-215-481-00	METAL 330K 1% 1/4W	
Q6006	6-550-698-01	TRANSISTOR SPA08N50C3-R8152		R6049	1-208-805-11	METAL CHIP 9.1K 0.5% 1/10W	
Q6007	6-550-698-01	TRANSISTOR SPA08N50C3-R8152		R6050	1-208-758-11	METAL CHIP 100 0.5% 1/10W	
Q6101	8-729-029-56	TRANSISTOR DTA144ESA		R6054	1-216-615-11	METAL CHIP 33 0.5% 1/10W	
Q6102	8-729-010-29	TRANSISTOR MSD601-RST1		R6056	1-216-295-91	SHORT CHIP 0	
Q6103	8-729-029-56	TRANSISTOR DTA144ESA		R6101	1-216-821-11	METAL CHIP 1K 5% 1/10W	
Q6104	8-729-010-29	TRANSISTOR MSD601-RST1		R6102	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
Q6105	8-729-010-29	TRANSISTOR MSD601-RST1		R6103	1-216-821-11	METAL CHIP 1K 5% 1/10W	
< RESISTOR >				R6104	1-216-821-11	METAL CHIP 1K 5% 1/10W	
JR6002	1-216-295-91	SHORT CHIP 0		R6105	1-216-821-11	METAL CHIP 1K 5% 1/10W	
JR6004	1-216-295-91	SHORT CHIP 0		R6106	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R6003 Δ	1-202-933-61	FUSIBLE 0.1 10% 1/2W		R6107	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R6004 Δ	1-205-998-11	CEMENTED 1 5% 10W		R6108	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R6005 Δ	1-205-998-11	CEMENTED 1 5% 10W		R6109	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R6006 Δ	1-205-998-11	CEMENTED 1 5% 10W		R6110	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R6007	1-243-979-21	METAL OXIDE 0.1 5% 2W		< RELAY >			
< TRANSFORMER >				RY6001 Δ	1-755-395-11	RELAY (AC POWER)	
T6001 Δ	1-431-402-11	TRANSFORMER, LINE FILTER		RY6002 Δ	1-755-389-11	RELAY (AC POWER)	
T6002 Δ	1-437-850-12	TRANSFORMER, CONVERTER (PIT)		< TRANSFORMER >			
T6003 Δ	1-431-402-11	TRANSFORMER, LINE FILTER		T6001 Δ	1-431-402-11	TRANSFORMER, LINE FILTER	
T6101 Δ	1-437-483-11	TRANSFORMER, STANDBY		T6002 Δ	1-437-850-12	TRANSFORMER, CONVERTER (PIT)	

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

G

VM

REF.NO.	PART.NO.	DESCRIPTION	REMARK	REF.NO.	PART.NO.	DESCRIPTION	REMARK
< THERMISTOR >				* A-1405-508-A VM Board, Complete			
TH6002 Δ	1-804-650-11	THERMISTOR, POSITIVE		4-382-854-01	SCREW (M3X8), P, SW (+)		
G Board, Variant Parts 32HQ100				< CAPACITOR >			
< CAPACITOR >				C7400	1-107-883-11	ELECT 330UF 20.00% 16V	
C6005	1-216-965-91	ELECT 22UF 20.00% 50V		C7401	1-126-935-11	ELECT 470UF 20.00% 16V	
< DIODE >				C7402	1-137-150-11	FILM 0.01UF 5.00% 100V	
D6006	8-719-081-97	DIODE MMDL914T1		C7403	1-104-655-91	ELECT 470UF 20.00% 6.3V	
D6007	8-719-081-97	DIODE MMDL914T1		C7405	1-126-933-11	ELECT 100UF 20.00% 16V	
< TRANSISTOR >				C7406	1-104-655-91	ELECT 470UF 20.00% 6.3V	
Q6005	8-729-029-56	TRANSISTOR DTA144ESA		C7407	1-107-364-11	MYLAR 0.01UF 10.00% 200V	
Q6010	8-729-119-78	TRANSISTOR 2SC2785-HFE		C7408	1-107-364-11	MYLAR 0.01UF 10.00% 200V	
< RESISTOR >				C7409	1-107-649-11	ELECT 2.2UF 20.00% 250V	
R6016	1-216-821-11	METAL CHIP 1K 5% 1/10W		C7410	1-130-471-00	MYLAR 0.001UF 5.00% 50V	
R6017	1-216-833-11	METAL CHIP 10K 5% 1/10W		C7411	1-130-471-00	MYLAR 0.001UF 5.00% 50V	
R6018	1-247-895-91	CARBON 470K 5% 1/4W		C7412	1-126-935-11	ELECT 470UF 20.00% 16V	
R6019	1-247-891-00	CARBON 330K 5% 1/4W		C7413	1-126-935-11	ELECT 470UF 20.00% 16V	
R6020	1-216-820-11	METAL CHIP 820 5% 1/10W		C7414	1-107-652-11	ELECT 10UF 20.00% 250V	
R6057	1-208-798-11	METAL CHIP 4.7K 0.5% 1/10W		C7415	1-107-363-91	MYLAR 0.0068UF 10.00% 200V	
G Board, Variant Parts 36HQ100				C7417	1-102-514-11	CERAMIC 22PF 5.00% 50V	
< CAPACITOR >				C7418	1-101-880-00	CERAMIC 47PF 5.00% 50V	
C6005	NOT FITTED			< CONNECTOR >			
< DIODE >				CN7401	* 1-564-510-11	PLUG, CONNECTOR 7P	
D6006	NOT FITTED			CN7402	* 1-564-506-11	PLUG, CONNECTOR 3P	
D6007	NOT FITTED			CN7403	* 1-564-506-11	PLUG, CONNECTOR 3P	
< TRANSISTOR >				CN7404	* 1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	
Q6005	NOT FITTED			CN7405	* 1-564-506-11	PLUG, CONNECTOR 3P	
Q6010	NOT FITTED			< DIODE >			
< RESISTOR >				D7400	8-719-991-33	DIODE 1SS133T-77	
R6016	NOT FITTED			D7401	8-719-510-02	DIODE 1N54	
R6017	NOT FITTED			D7402	1-535-303-00	LEAD, JUMPER (5.0MM)	
R6018	NOT FITTED			D7403	8-719-991-33	DIODE 1SS133T-77	
R6019	NOT FITTED			D7404	8-719-991-33	DIODE 1SS133T-77	
R6020	NOT FITTED			D7405	8-719-924-11	DIODE MTJ3-T-77-22	
R6057	NOT FITTED			D7406	8-719-924-11	DIODE MTJ3-T-77-22	
< FERRITE BEAD >				< COIL >			
FB7400	1-535-303-00	LEAD, JUMPER (5.0MM)		L7400	1-410-784-41	INDUCTOR 0.18UH	
FB7401	1-535-303-00	LEAD, JUMPER (5.0MM)		L7401	1-414-930-21	INDUCTOR 2.2UH	
< TRANSISTOR >				< TRANSISTOR >			
Q7400	8-729-119-78	TRANSISTOR 2SC2785-HFE					

Note: The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

VM F

REF.NO.	PART.NO.	DESCRIPTION	REMARK
Q7401	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q7402	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q7403	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q7404	8-729-026-39	TRANSISTOR 2SA933AS-QT	
Q7405	8-729-026-39	TRANSISTOR 2SA933AS-QT	
Q7406	8-729-045-05	TRANSISTOR 2SA2005	
Q7407	8-729-045-04	TRANSISTOR 2SC5511	
Q7408	8-729-026-39	TRANSISTOR 2SA933AS-QT	
Q7409	8-729-119-78	TRANSISTOR 2SC2785-HFE	

< RESISTOR >

R7401	1-247-843-11	CARBON	3.3K	5%	1/4W
R7402	1-249-413-11	CARBON	470	5%	1/4W
R7403	1-249-393-11	CARBON	10	5%	1/4W
R7404	1-249-420-11	CARBON	1.8K	5%	1/4W
R7405	1-249-425-11	CARBON	4.7K	5%	1/4W
R7406	1-249-425-11	CARBON	4.7K	5%	1/4W
R7407	1-249-399-11	CARBON	33	5%	1/4W
R7408	1-247-807-31	CARBON	100	5%	1/4W
R7409	1-249-409-11	CARBON	220	5%	1/4W
R7410	1-249-401-11	CARBON	47	5%	1/4W

R7411	1-249-401-11	CARBON	47	5%	1/4W
R7412	1-249-429-11	CARBON	10K	5%	1/4W
R7413	1-249-414-11	CARBON	560	5%	1/4W
R7414	1-249-432-11	CARBON	18K	5%	1/4W
R7415	1-260-316-51	CARBON	100	5%	1/2W
R7416	1-249-388-11	CARBON	3.9	5%	1/4W
R7417	1-249-432-11	CARBON	18K	5%	1/4W
R7418	1-249-414-11	CARBON	560	5%	1/4W
R7419	1-249-421-11	CARBON	2.2K	5%	1/4W
R7420	1-249-421-11	CARBON	2.2K	5%	1/4W

R7421	1-249-386-11	CARBON	2.7	5%	1/4W
R7422	1-249-405-11	CARBON	100	5%	1/4W
R7423	1-215-915-11	METAL OXIDE	470	5%	3W
R7425	1-535-303-00	LEAD, JUMPER	(5.0MM)		
R7427	1-249-401-11	CARBON	47	5%	1/4W

R7428	1-249-413-11	CARBON	470	5%	1/4W
R7429	1-249-413-11	CARBON	470	5%	1/4W
R7430	1-249-417-11	CARBON	1K	5%	1/4W
R7432	1-249-415-11	CARBON	680	5%	1/4W
R7433	1-249-400-11	CARBON	39	5%	1/4W

R7434	1-249-395-11	CARBON	15	5%	1/4W
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* A-1405-851-A F Board, Complete 32HQ100
* A-1405-512-A F Board, Complete 36HQ100

F Board, Common Parts

< CAPACITOR >

C500	1-126-969-11	ELECT	220UF	20.00%	50V
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REF.NO.	PART.NO.	DESCRIPTION	REMARK
		< CONNECTOR >	

CN6300	Δ * 1-580-843-11	PIN, CONNECTOR (POWER)	
CN6301	1-695-915-11	TAB (CONTACT)	
CN6302	Δ * 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	

< DIODE >

D500	8-719-109-89	DIODE RD5.6ESB2	
D501	6-500-166-01	DIODE 1-59SRSGC-CC-01	
D502	8-719-109-89	DIODE RD5.6ESB2	

< FUSE >

F6300	Δ * 1-576-227-21	FUSE (H.B.C.) 5A/250V	
F6300	Δ * 1-533-725-11	FUSE (H.B.C.)	

< IC >

IC500	8-742-180-30	HYB IC SBX3081-51(30)	
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< TRANSISTOR >

Q500	8-729-027-38	TRANSISTOR DTA144EKA-T146	
Q501	8-729-027-43	TRANSISTOR DTC114EKA-T146	

< RESISTOR >

R500	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R501	1-216-813-11	METAL CHIP	220	5%	1/10W
R502	1-216-809-11	METAL CHIP	100	5%	1/10W
R503	1-216-841-11	METAL CHIP	47K	5%	1/10W
R504	1-216-813-11	METAL CHIP	220	5%	1/10W

R505	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R506	1-216-815-11	METAL CHIP	330	5%	1/10W

< SWITCH >

S6300	Δ * 1-576-227-21	SWITCH (H.B.C.)	
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F Board, Variant parts 32HQ100

A501	NOT FITTED		
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< CAPACITOR >

C6300	NOT FITTED		
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< CONNECTOR >

CN500	* 1-564-507-11	PLUG, CONNECTOR 4P	
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< VARISTOR >

VD6300	Δ * 1-804-995-11	VARISTOR	
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Note: The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

F MS3 H

REF.NO.	PART.NO.	DESCRIPTION	REMARK
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F Board, Variant parts 36HQ100

A501	4-205-711-01	HOLDER, LED	
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< CAPACITOR >

C6300	1-113-924-11	CERAMIC	0.0047UF	20.00%	250V
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< CONNECTOR >

CN500	* 1-564-519-11	PLUG, CONNECTOR 4P	
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< VARISTOR >

VD6300	Δ * 1-804-995-11	VARISTOR (H.B.C.)	
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* A-1405-513-A MS3 Board, Complete

< CAPACITOR >

C705	1-164-156-11	CERAMIC CHIP 0.1UF		25V
C706	1-163-021-91	CERAMIC CHIP 0.01UF	10.00%	50V
C708	1-124-779-00	ELECT CHIP 100F	20.00%	16V
C709	1-107-826-11	CERAMIC CHIP 0.1UF	10.00%	16V
C710	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%	25V

C712	1-164-156-11	CERAMIC CHIP 0.1UF		25V
C713	1-126-390-11	ELECT CHIP 22UF	20.00%	6.3V
C714	1-107-826-11	CERAMIC CHIP 0.1UF	10.00%	16V
C715	1-107-826-11	CERAMIC CHIP 0.1UF	10.00%	16V
C716	1-107-826-11	CERAMIC CHIP 0.1UF	10.00%	16V

C717	1-126-390-11	ELECT CHIP 22UF	20.00%	6.3V
C719	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%	25V
C720	1-162-970-11	CERAMIC CHIP 0.01UF	10.00%	25V

< CONNECTOR >

CN701	* 1-816-402-12	CONNECTOR, MEMORY STICK	
CN702	* 1-794-959-21	PIN, CONNECTOR (PWB, PRINT) 20P	

< DIODE >

D701	8-719-421-69	DIODE MA133	
D702	8-719-421-69	DIODE MA133	
D703	8-719-421-69	DIODE MA133	
D704	8-719-421-69	DIODE MA133	
D705	8-719-421-69	DIODE MA133	

D706	8-719-421-69	DIODE MA133	
D707	8-719-421-69	DIODE MA133	
D708	8-719-421-69	DIODE MA133	
D709	8-719-064-07	DIODE SML-310LTT86	
D710	8-719-083-58	DIODE UDZSTE-173.9B	

D711	8-719-083-58	DIODE UDZSTE-173.9B	
D712	8-719-421-69	DIODE MA133	
D713	8-719-421-69	DIODE MA133	
D714	8-719-421-69	DIODE MA133	
D715	8-719-421-69	DIODE MA133	

REF.NO.	PART.NO.	DESCRIPTION	REMARK
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D716	8-719-421-69	DIODE MA133	
D717	8-719-421-69	DIODE MA133	

< FERRITE BEAD >

FB701	1-414-921-11	FERRITE	00H
FB702	1-414-921-11	FERRITE	00H
FB704	1-414-921-11	FERRITE	00H

< IC >

IC701	8-759-639-86	IC SN65LVDS32DR	
IC702	6-701-763-11	IC D690LV017ASMX	
IC703	8-759-698-08	IC SN74CBTLV16125DCKR	

< COIL >

L701	1-419-370-21	INDUCTOR	00H
L702	1-419-370-21	INDUCTOR	00H
L703	1-419-370-21	INDUCTOR	00H
L704	1-419-370-21	INDUCTOR	00H
L705	1-419-370-21	INDUCTOR	00H

< TRANSISTOR >

Q701	8-729-010-05	TRANSISTOR MSB709-RT1	
Q702	8-729-029-14	TRANSISTOR DTC144EKA-T106	
Q703	8-729-010-05	TRANSISTOR MSB709-RT1	

< RESISTOR >

R701	1-216-801-11	METAL CHIP	22	5%	1/10W
R702	1-216-801-11	METAL CHIP	22	5%	1/10W
R704	1-216-801-11	METAL CHIP	22	5%	1/10W
R705	1-218-692-11	METAL CHIP	1K	0.5%	1/10W
R706	1-216-809-11	METAL CHIP	100	5%	1/10W

R707	1-216-809-11	METAL CHIP	100	5%	1/10W
R708	1-216-809-11	METAL CHIP	100	5%	1/10W
R709	1-216-809-11	METAL CHIP	100	5%	1/10W
R710	1-216-803-11	METAL CHIP	33	5%	1/10W
R721	1-216-821-11	METAL CHIP	1K	5%	1/10W

R722	1-216-809-11	METAL CHIP	100	5%	1/10W
R724	1-216-833-11	METAL CHIP	10K	5%	1/10W
R725	1-216-845-11	METAL CHIP	100K	5%	1/10W
R726	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R728	1-216-864-11	SHORT CHIP	0		

R731	1-216-864-11	SHORT CHIP	0		
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* A-1405-514-A H Board, Complete

< CAPACITOR >

C800	1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C801	1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C802	1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C803	1-102-074-00	CERAMIC	0.001UF	10.00%	50V
C806	1-126-960-11	ELECT	1UF	20.00%	50V

Note : The components identified by shading and marked Δ are critical for safety. Replace only with the part numbers specified in the parts list.

H

REF.NO.	PART.NO.	DESCRIPTION	REMARK
C807	1-126-960-11	ELECT	10F 20.00% 50V
C808	1-102-106-00	CERAMIC	100PF 10.00% 50V
C809	1-102-106-00	CERAMIC	100PF 10.00% 50V
C811	1-102-074-00	CERAMIC	0.0010F 10.00% 50V
C812	1-102-074-00	CERAMIC	0.0010F 10.00% 50V

< CONNECTOR >

CW800	1-779-947-11	TERMINAL BLOCK, S
CW807	* 1-564-526-11	PLUG, CONNECTOR 11P
CW809	* 1-564-522-11	PLUG, CONNECTOR 7P

< DIODE >

D802	8-719-929-15	DIODE HS9.1MB2
D803	8-719-929-15	DIODE HS9.1MB2
D804	8-719-109-97	DIODE RD6.8ESB2
D805	8-719-109-97	DIODE RD6.8ESB2

< SOCKET >

J800	1-750-264-11	JACK
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< COIL >

L800	1-535-303-00	LEAD, JUMPER (5.0MM)
L801	1-535-303-00	LEAD, JUMPER (5.0MM)
L802	1-408-603-31	INDUCTOR 100H
L803	1-408-603-31	INDUCTOR 100H
L804	1-410-119-11	INDUCTOR 1MH

< RESISTOR >

R803	1-249-406-11	CARBON	120	5%	1/4W
R804	1-249-406-11	CARBON	120	5%	1/4W
R805	1-247-895-91	CARBON	470K	5%	1/4W
R806	1-247-895-91	CARBON	470K	5%	1/4W
R809	1-247-895-91	CARBON	470K	5%	1/4W
R810	1-247-895-91	CARBON	470K	5%	1/4W
R815	1-249-406-11	CARBON	120	5%	1/4W
R816	1-249-406-11	CARBON	120	5%	1/4W
R817	1-247-807-31	CARBON	100	5%	1/4W
R818	1-247-807-31	CARBON	100	5%	1/4W

< SWITCH >

S800	1-762-816-11	SWITCH, TACTILE
S801	1-762-816-11	SWITCH, TACTILE
S802	1-762-816-11	SWITCH, TACTILE

REF.NO.	PART.NO.	DESCRIPTION	REMARK
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MISCELLANEOUS

Δ 1-571-433-21	SWITCH, PUSH (AC POWER)
1-825-177-11	LOUDSPEAKER (4.2X24CM)
1-542-437-11	SPEAKER (2CM)

Δ 1-424-855-11	COIL, CHOKE 290MH
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1-825-213-21	LOUDSPEAKER (10CM)
8-598-536-20	FRONT END BTF-KF412 (KV-32/36HQ100B)
8-598-534-10	FRONT END BTF-EC412 (KV-32/36HQ100E/K)

1-452-896-11	COIL, NA ROTATION (RT200)
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1-452-896-11	COIL, NA ROTATION (RT200)
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1-452-896-11	COIL, NA ROTATION (RT200)
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1-452-094-11	MAGNET, ROTATABLE DISK; 15MM
1-452-032-00	MAGNET, DISK; 10MM

ACCESSORIES AND PACKAGING MATERIALS

*4-094-059-01	CUSHION UPPER (KV-32HQ100B/E/K)
*4-095-022-01	CUSHION UPPER (KV-36HQ100B/E/K)
*4-094-060-01	CUSHION LOWER (KV-32HQ100B/E/K)
*4-095-023-01	CUSHION LOWER (KV-36HQ100B/E/K)
*4-094-058-01	INDIVIDUAL CARTON (KV-32HQ100B/E/K)
*4-095-024-01	INDIVIDUAL CARTON (KV-36HQ100B/E/K)
*4-206-555-11	BAG, PROTECTION (KV-32HQ100B/E/K)
*4-055-672-11	BAG, PROTECTION (KV-36HQ100B/E/K)

4-095-835-13	INSTRUCTION MANUAL (GERMAN/TURKISH/GREEK) (KV-32/36HQ100B)
4-095-835-23	INSTRUCTION MANUAL (ITALIAN) (KV-32/36HQ100E)
4-095-835-33	INSTRUCTION MANUAL (NORWEGIAN/PORTUGUESE/ SWEDISH/FINNISH/DANISH/SPANISH) (KV-32/36HQ100E)

4-095-835-43	INSTRUCTION MANUAL (GERMAN/ITALIAN/FRENCH/ DUTCH) (KV-32/36HQ100B)
4-095-835-53	INSTRUCTION MANUAL (ENGLISH) (KV-32/36HQ100B)
4-095-835-63	INSTRUCTION MANUAL (BULGARIAN/CZECH/RUSSIAN/ ENGLISH/POLISH) (KV-32/36HQ100K)

REMOTE COMMANDER

1-478-159-11	REMOTE COMMANDER (RM-940)
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TRACE

A new TV Repair Assistance Tool that combines ease of use and powerful PC software tools to allow you to save valuable time during many TV repairs.



The TRACE interface connects to the PC's serial port. It provides connection to the TV's I²C bus and can be provided with an InfraRed transmitter (optional).

The interface is powered by a standard 9 V PP3 battery for portable use, and can also be powered by an external 9V/25mA DC power supply.

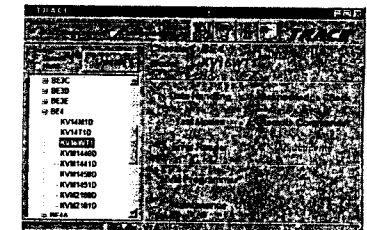
The TRACE software that is supplied with the interface allows you to:

- Read, restore and compare NVM contents via the I²C bus
- Acknowledge check of all I²C devices in the TV set
- Read Error Codes (emulation of the Error Reader tool)

With the optional IR Add-on kit, the following features can be added:

- Remote Commander emulation
- User programmable Functional Check through Infrared
- Fast and documented Test Mode setting of all Sony TV chassis

Additional features such as Adjustments and Troubleshooting are available in chassis-dependent software modules. Please contact your local Sony Service organisation for the latest information.



Note: For workshops already using the existing I²C Link parallel port interface (9-948-320-30), this software can be used as well, replacing the TV Data Handling software (9-948-340-50), but Error Reader and IR functions can only be accessed with the TRACE interface.

Partnumbers: TRACE Starter Kit (TRACE interface + software): 9-948-320-70
TRACE Software (for users of the I²C Link interface): 9-948-340-80
TRACE IR Add-on (IR interface + Remote Commander software): 9-948-320-80

PC requirements: IBM-compatible PC with operating system Windows95, Windows98, or WindowsNT*.

* WindowsNT only supported with TRACE interface

Sony Corporation
Sony UK
Service Promotions Dept.

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